RUSS OLSON VOLUME 27 A&B

ELECTRIC SHORT LINE RAILWAY

ELECTRIC SHORT LINE TERMINAL CO.

Description

Information regarding the Electric Short Line Railway, the Minnesota Western Railroad, the Minnesota Western Railway, and the Electric Short Line Terminal Company

Sub-divisions Within This Volume

- Contents of the front pocket
- Histories of the above-named companies
- Electric Short Line / Minnesota Western RR track, facilities, and operations
- Electric Short Line / Minnesota Western RR equipment
- Electric Short Line / Minnesota Western RR financials
- Electric Short Line Terminal Co.

CONTENTS OF THE FRONT POCKET

Gary E. Lenz

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USPS

321 S SHORE DR

Russell Olson

From: "Lenz, Gary" <Gary.Lenz@BNSF.com>
To: <elrymn@earthlink.net>
Sent: Saturday, September 23, 2006 2:02 PM
Subject: John Luce

Hello Russ: I found out the following about J. E. Luce. Born 10-27-1860 in Red Wing MN and Graduated from the U of Pennsylvania with degrees in both medicine and dentistry. He was a brother of W.L. Luce and I found his name listed in the 1891 Grain Dealers and Shippers Gazetteer for the GN. He was president of the Hampshire Arms Hotel where he died in March of 1943. The obituary stated that he was associated for many years with the Minnesota Western Railroad.

OK

It also appears as though W.L. Luce nay have had another son by the name of George W. who was born on February 22nd of 1884. I have not been able to verify this or find out any other information about him yet.

Regards, Gary

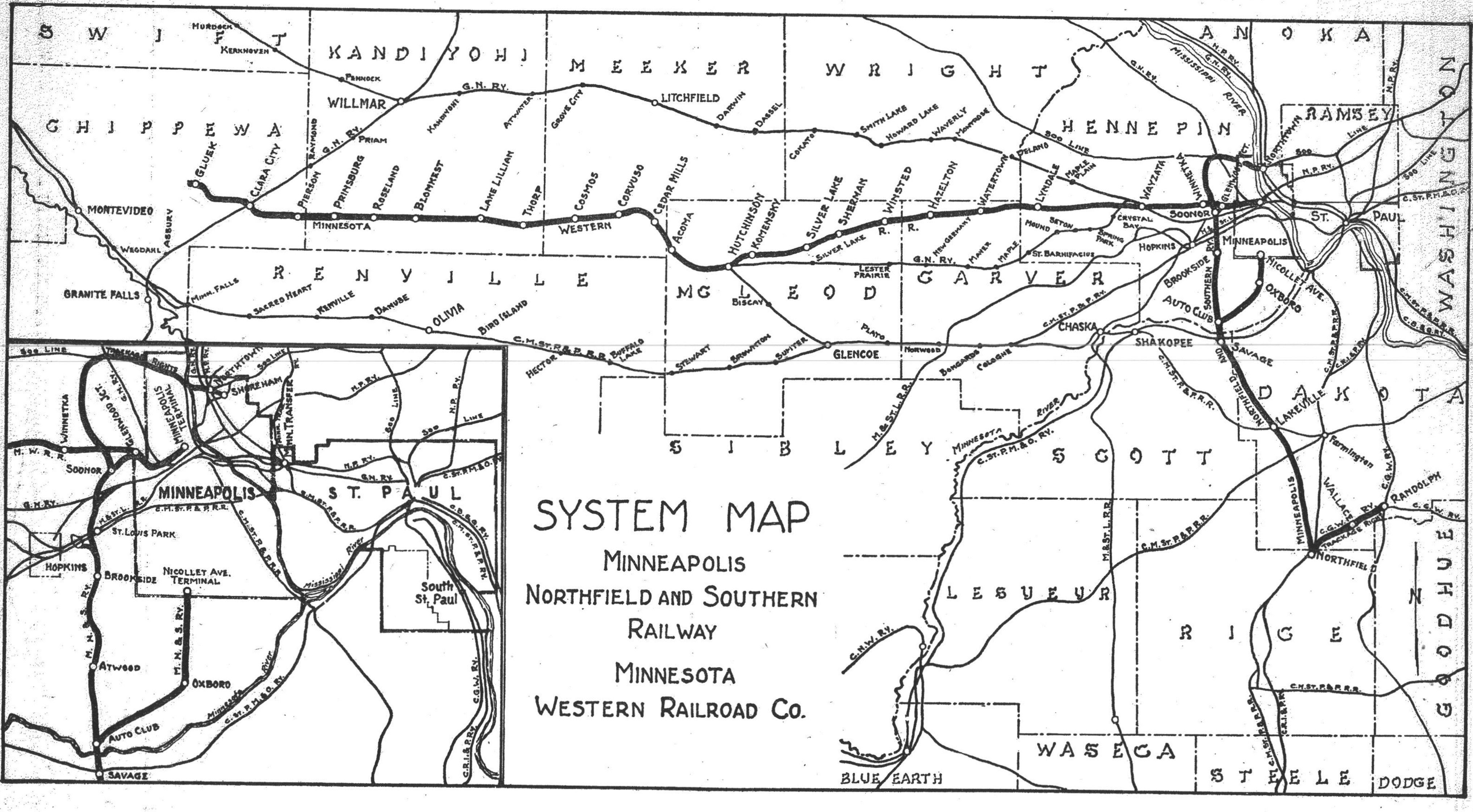
HISTORIES OF THE ELECTRIC SHORT LINE RAILWAY, THE MINNESOTA WESTERN RAILROAD, AND THE MINNESOTA WESTERN RAILWAY

ELECTRIC SHORT LINE RAILWAY

MINNESOTA WESTERN RAILROAD

MINNESOTA WESTERN RAILWAY

ELECTRIC SHORT LINE TERMINAL COMPANY



SYSTEM MAP

MINNEAPOLIS NORTHFIELD AND SOUTHERN RAILWAY

MINNESOTA WESTERN RAILROAD CO.

SWIFT
KANDIYOHI
MEEKER
WRIGHT
ANOKA
CHIPPEWA
HENNEPIN
RAMSEY
WASHINGTON
RENVILLE
McLEOD
CARVER
SIBLEY
SCOTT
DAKOTA
LESUEUR
RICE
GOODHUE
WASECA
STEELE
DODGE
BLUE EARTH
MURDOCK
KERKHOVEN
PENNOCK
WILLMAR
G.N. RY.
LITCHFIELD
DARWIN
DASSEL
COKATO
SMITH LAKE
HOWARD LAKE
WAVERLY
MONTROSE
DELANO
SOO LINE
MAPLE PLAIN
WAYZATA
MINNETONKA
GLENWOOD JCT.
NORTHTOWN
MONTEVIDEO
GLUEK
CLARA CITY
RAYMOND
PIERSON
PRINSBURG
ROSELAND
BLOMKEST
LAKE LILLIAN
THORP
COSMOS
CORVUSO
CEDAR MILLS
ACOMA
HUTCHINSON
KOMENSKY
SILVER LAKE
SHERMAN
WINSTED
HAZELTON
WATERTOWN
LYNDALE
SOONOR
MINNESOTA
WESTERN
R.
R.
WEGDAHL
ASBURY
GRANITE FALLS
MINN. FALLS
SACRED HEART
RENVILLE
DANUBE
OLIVIA
BIRD ISLAND
HECTOR
BUFFALO LAKE
C.M.ST.P.&P.R.R.
STEWART
BROWNTON
SUPITER
GLENCOE
PLATO
NORWOOD
BONGARDS
COLOGNE
BISCAY
LESTER PRAIRIE
G.N. RY.
NEW GERMANY
MAYER
MAPLE
ST. BARNIFACIUS
MOUND
SETON
SPRING PARK
CRYSTAL BAY
HOPKINS
MINNEAPOLIS
ST. PAUL
BROOKSIDE
NICOLLET AVE.
OXBORO
AUTO CLUB
SAVAGE
CHASKA
SHAKOPEE
LAKEVILLE
Farmington
WALLACE
RANDOLPH
NORTHFIELD
MINNEAPOLIS NORTHFIELD AND SOUTHERN
C.G.W.R. TRACKAGE RIGHTS
MINNESOTA RIVER
M.&ST.L.R.R.
C.ST.P.M.&O.RY.
C.N.W. RY.
C.M.ST.P.&P.R.R.
C.R.I.&P.RY.
MISSISSIPPI RIVER
N.P. RY.
SOO LINE
M.W.R.R.
WINNETKA
GLENWOOD JCT.
MINNEAPOLIS TERMINAL
SHOREHAM
MINN. TRANSFER
ST. LOUIS PARK
HOPKINS
BROOKSIDE
NICOLLET AVE. TERMINAL
M.N.&S.RY.
ATWOOD
OXBORO
AUTO CLUB
SAVAGE
Mississippi River
South St. Paul
C.G.W. RY.
C.R.I.&P.RY.

ELECTRIC SHORT LINE RAILWAY
MINNESOTA WESTERN RAILWAY

WILLIAM L. LUCE 1857-1948

Born in Maine, Mr. Luce moved to Red Wing, Minnesota, during 1858 and developed a large and important grain buying and shipping business. As a result he became the owner and operator of a series of well-equipped grain elevators along the Chicago Great Western Railway. He married Nellie B. David in 1881. To facilitate his business he moved the family to Minneapolis during 1889. About 1900 he also became involved in real estate. Due to his knowledge of the grain trade he became interested in building a railroad west from Minneapolis into territory not adequately served by the existing railroads.

ERLE D. LUCE 1882-1946

The son of William L. Luce, he was born @ Red Wing, Minn. May 20, 1882. He married Hazel Brown, the daughter of Clarence A. Brown, VP & GM manager of the St.Anthony & Dakota Elevator Co., December 8, 1904. Graduating from the University of Minnesota law school in 1907, he immediately began working for this father, entering fully and enthusiastically into his father's railroad conception. However he was interested in constructing this as an electric railway. Interested in corporation/public utility law, he handled numerous details of building the railway; especially the securing of right-of-way and terminal facilities as well as general supervision of the surveying and construction work. He was an able financier.

He had enlisted in the Minnesota National Guard as a private during October, 1898. Receiving continuous rapid promotions, he reached the rank of colonel in July, 1911. He used this title extensively. Active military service was experienced from June, 1916, through November, 1919. (His photograph appears on page 356 of the "Compendium of History" by Taylor, 1914. 977.657C)

Aside from the railroad activity, he "effected erection" during 1912 of the Coliseum Building, (Cost $75,000) Minneapolis, and the State Auditorium (cost $30,000). Real estate investments included ownership of the Phoenix Building; Hampshire Arms, Netly Corners, Dunsmore House, Forest Court, Fremont and Franklin Ave. apartment buildings.

Hampshire Arms 9th St and 4th Ave S.
Phoenix Bldg 4th St and Marquette Ave.

ELECTRIC SHORT LINE RAILROAD

This company was incorporated August 10, 1908, by Severn Solverson, Minneapolis; E. C. Hinde, Sioux Falls, S.D.; and Frank E. Reed, Glencoe, Minnesota; for the purpose of building an electric railway west from Minneapolis through prosperous farming country via Montevideo, Minn., to Watertown, S.D. Meanwhile the Luce family had organized the Glenwood Real Estate and Improvement Co. and began purchasing real estate within Minneapolis. When the real estate company acquired the needed properties, all were deeded to the Electric Short Line Railroad. These activities were taking place at the same time the Minneapolis, St.Paul, Rochester & Dubuque Electric Traction Co.'s line ("Dan Patch Electric Line") from Minneapolis to Northfield was under construction.

The apparent reason for this subterfuge in right-of-way acquisition is explained in the "Dan Patch News" issue of November, 1912. "---varied and numerous interests were on the alert to block all plans for the entrance of our Road into the city but by quiet, well-directed work an entrance and terminal location were secured that are far better located than that of any of the steam roads entering this city." "---our cars will be operated right into the heart of the city over a private right-of-way and no franchise will be asked or required." "M.W. Savage was the founder and sponsor for this enterprise." It is curious that Savage made no mention whatsoever of the Luce family's responsibility for this accomplishment, which provided a private right-of-way from a terminal site at 2nd Ave.N. and 7th St. N., Minneapolis, to Boagen Green, a housing development in the suburb of Golden Valley adjacent to the western city limits of Minneapolis at Glenwood Park.

The front cover of the previously referred to November, 1912, issue of "Dan Patch News" displays a cartoon with the statement "The Public Backing Dan Patch R.R. And Other Enterprises". The E.S.L. R.R. was also raising funds solely by sales of capital stock. This issue devotes several pages to construction on the E.S.L. R.R., but never mentioning that name, giving the impression that all such activity was being done by the Dan Patch Electric Line. Selected quotations follow. "The contracts have been let and work has begun on the three miles of double track line within the city limits on private right-of-way. About the middle of October carloads of piling and bridge timber began to arrive---and contractors immediately put their forces at work with the result that up to November 1st, 5,500 lineal feet of piling was driven and 26,000 b.m. of bridge timber put in place; as much more has been added since that date." "This piling construction extending from Western and Upton Avenues North to Sheridan and Chestnut, will carry our rails over the low marshy land lying along Bassett Creek." "The entrance into Minneapolis is effected through what is known as Bassett's Creek Valley, and while in this valley, our curvature is limited to a six degree maximum, with a light even grade line. There are crossings under two of the main traveled city streets, while at others less important the company crosses at grade." A construction material yard had been established at 2nd St. N. and Aldrich Ave. N. where a railroad connection with the Great Northern Ry. had been made. A 200 ft. long steel bridge was built at Holden St. over the Great Northern/Minneapolis & St.Louis Railways (contract dated in November, 1911).

The Minneapolis Northfield & Southern Ry. Master List of Contracts indicates the following involving the Electric Short Line Railroad.
Crossing of the G.N. Ry. at Penn Ave. and Chestnut Ave. bridge: October, 1912.
Connection with G.N. Ry. at Emerson Ave. and Chestnut Ave.: May, 1913.
Connection with G.N. Ry. through McFarland's Addition: May, 1914.
Grade crossing with G.N. Ry. at Lyndale Ave. and Western Ave.: June, 1914.

According to Minnesota Railroad & Warehouse Commission records 3.19 miles of road from the Minneapolis terminal to Boagen Green ~~was~~ were fully completed (exclusive of any overhead poles and trolley wire) during 1913 at a cost of $882,467.94. Erle D. Luce hosted a dinner March 25, 1913, at the Commercial Club for more than 500 persons (Minneapolis businessmen and citizens of various towns along the proposed railroad) to celebrate the acquisition of adequate terminals. No reference has been found as to a date of the first revenue operation over this section of line under the E.S.L. R.R. name.

On May 6, 1915, the corporate name of the Electric Short Line Railroad was changed to the Electric Short Line Terminal Co. As of June 30, 1915, the reported track mileage from Minneapolis to Boagen Green (Luce Line Junction) was: first main track 3.06 miles, second main track 3.00 miles, total track 6.06 miles. The subsequent history of the E.S.L.T. Co. will be related in a separate chapter.

ELECTRIC SHORT LINE RAILWAY
"LUCE ELECTRIC LINES"

This company was incorporated in Arizona December 1, 1908. It was controlled through majority stock ownership by the Minnesota Construction Co., a corporation controlled by the Luce family. Officers of the newly formed corporation were: William L. Luce, president; Erle D. Luce, first vice president; Severn Solverson, secretary; and R. C. Jones, general manager.

According to MRR&WC records construction progress was slow.

			Construction Dates	
From	To	Miles	Start	Complete
Boagen Green	Parker's Lake	6.94	6-1909	1-19-14
Parker's Lake	Stubb's Bay	7.78	4-1913	6- 2-14
Stubb's Bay	Winsted	22.44	10-1914	2-13-15
Winsted	Hutchinson	17.24	8-1915	2-28-16

Cost of construction from Luce Line Jct. (Boagen Green) to Hutchinson was $1,639,006.39, none of which included overhead poles or trolley wire.

The beginning date of revenue service is uncertain. Like the "Dan Patch Electric Line" and probably for the same reasons, service began with gas-electric passenger cars. The first trip after completion of the line as far as Wayzata took place April 12, 1914, when car 304 took Minneapolis businessmen to a dinner served by the Men's Brotherhood of the Wayzata Congregational Church. The Wayzata "station", actually only a loading platform, was located at the junction of Minnetonka and Beaver Dam Streets. (Residents petitioned for relocating it where Broadway, if extended, would meet the track.)

As of June 30, 1914, the Electric Short Line Railway:

1) operated the Electric Short Line Railroad under contract, Minneapolis to Boagen Green (E.S.L. Ry. paid E.S.L. R.R. $2.40 for each round trip):	3.27 miles
2) owned and operated Boagen Green to Stubb's Bay:	14.51 miles
Total operated:	17.78 miles

The completed line to Winsted was opened February 16, 1915, with car 300 pulling a passenger trailer containing Col. Luce and party to attend a banquet celebrating opening of the line to traffic. The first official regular train was operated by car 306.

Construction Resumed

Again like the "Dan Patch Electric Line" the E.S.L. Ry. was forced to sell mortgage bonds to finance construction to Hutchinson. The original territorial objective had not been forgotten. Despite poor financial performance the railroad was able to sell additional mortgage bonds to finance construction westward. Hutchinson to Cosmos, 18.00 miles, was completed during 1922. Cosmos to Lake Lillian, 8.34 miles, was completed during 1923. The completed track from R/W station 3951+50.7 (the westerly line of S16 T117N R22W) to R/W station 4392+?? (Lake Lillian station) was approved by the MRR&WC June 18, 1923. Company policy was to locate depot sites (stations) at nine mile intervals with sidings approximately midway between stations.

Total cost of these extensions was $476,230.77, excluding any electrification. Five days after the Lake Lillian extension was completed, the railroad was forced into receivership. W. J. Hield and Erle D. Luce were appointed co-receivers. Mortgage foreclosure proceedings resulted in public auction of the property April 30, 1924. (The Electric Short Line Terminal Co. was not involved.)

MINNESOTA WESTERN RAILROAD

The bondholders' committee had incorporated the Minnesota Western Railroad in Delaware April 25, 1924. W.L. Luce and Erle D. Luce were still involved as indicated by the list of officers and directors appended. The new company was the successful bidder at the auction of the line from Glenwood Junction (formerly Luce Line Junction) to Lake Lillian with an offer of $275,000.

During 1927 construction of the extension westward toward Montevideo was undertaken. A mortgage bond issue in the amount of $600,000 was sold to finance construction. Track was completed during

1927 from Lake Lillian to Gluek, 30.67 miles, at a cost of $612,399.48. Montevideo was still 12 miles away. It was impossible to secure additional financing so Gluek became the western terminal of the railroad.

In an effort to improve performance, a management, trackage and industry agreement was entered into with the Minneapolis, Northfield & Southern Ry. in late 1927. The effective date was apparently December 1, 1927. Under MN&S Ry. management lead by Harry E. Pence track ballasting was undertaken on the entire line, freight service promoted and increased, grain elevators and stock handling facilities constructed in many towns along the railroad.

However the financial depression of the early 1930's resulted in foreclosure on the mortgage bonds during 1932.

MINNESOTA WESTERN RAILWAY

Ownership of the property was transferred to this newly incorporated company in October, 1932. [redacted] Freight and passenger operations continued under MN&S Ry. management. Passenger service was provided with M.W. Ry. gas-electric passenger cars (plus a passenger trailer when needed) but freight service was operated with rented MN&S Ry. steam locomotives throughout the 1930's.

With the onset of World War II Cargill Inc. decided to go into shipbuilding for the U. S. Navy. In January, 1942, the proposed location was made up of a number of contiguous properties at Savage, Minn. One of these sites was the location where the famous trotter "Dan Patch" trained, and the old horse barn and training track were still in existence. Even though dredging 13 miles of the Minnesota River would be required, the site was considered absolutely ideal, served by two railroads, the CStPM&O Ry. and the MN&S Ry. The properties were acquired during February, 1942. The Port Cargill shipbuilding project proposal for the Navy Department was assembled in late February. A major problem involved the railroad connections at Savage.

The CStPM&O Ry. flatly refused to put Savage within the Twin City switching district, which would seriously hamper its use as a grain loading and coal unloading point. The MN&S Ry. was equally reluctant to do so because they would lose revenue from their stations intermediate between Minneapolis and Savage. As a solution the MN&S Ry. proposed that Cargill Inc. purchase the Minnesota Western Ry.; the MN&S Ry. would then give the M.W. Ry. switching rights over the MN&S Ry. to Savage. This would put Cargill in the position of paying only the actual transportation costs plus a nominal profit to the MN&S Ry. It would also put Cargill in a good competitive position in central Minnesota as it could afford to buy grain agressively at Clara City and do an extensive business consisting of trucking grain into Clara City and coal and gasoline out.

The M.W. Ry. was just about breaking even conducting a twice-weekly freight service and one daily except Sunday passenger round trip. Cargill thought it could purchase the M.W. Ry. for $100,000. John H. MacMillan and Cargill MacMillan would purchase the M.W. Ry. personally as I.C.C. regulations would not allow Cargill to own two transportation companies; Cargo Carriers Inc. was the other company. The deal was consummated almost immediately for it solved the problems of freight service in and out of Savage. The management, trackage and industry contract with the MN&S Ry. was made during March, 1942, in the names of John H. MacMillan and Cargill Inc.

Early August, 1942: "We have had a lot of fun with our railroad. We receive delivery of our 660 h.p. diesel locomotive the last of this month. Inasmuch as it will be the railroad's only locomotive we are all looking forward to it with anticipation".

Passenger service was discontinued in 1947.

9-10-47

In essence the personal ownership of the M.W. Ry. was disliked by Cargill top executives for various reasons (page 743) which made it virtually impossible to properly exploit the situation and the personal owners disliked it because the financial return was incommensurate with the risk and possible criticism. At the time the two MacMillans had bought the railroad, an option for the railroad stock had been given to Cargill Securities Co. (the family company). In December, 1949, the option was exercised in the following way. A new company, the Minnesota Western Company, was formed, the common stock of which was offered to the group of common shareholders who had participated in the terminals and the Carpeake Corp. There was also preferred stock, the largest block to go to the Cargill Securities Co., with a smaller amount to the Cargill Inc. salaried employees pension trust.

The railroad had been only a moderate performer during the MacMillan ownership. Most of the management felt that there was a potential for more grain trade over the line, particularly if trackside facilities were upgraded. Accordingly a separate corporation, The Wesota Company, was set up to own the grain elevators. The Minnesota Western Company was the owner of The Wesota Company.

Cargill had planned to build a large grain terminal at Gluek which was renamed Wesota. Construction never materialized. The country elevator at Wesota was seriously damaged by fire in January, 1953. Wesota again became Gluek.

MINNEAPOLIS INDUSTRIAL RAILWAY

The Minneapolis & St.Louis Ry. purchased all the outstanding capital stock of the Minnesota Western Company from Cargill Inc. August 3, 1956. This also ended the management agreement with the MN&S Ry. except that MN&S Ry. crews with seniority dates prior to the take-over retained working rights over the railroad. Thus M&StL Ry. locomotives could be operated by MN&S Ry. crews over the line.

The corporate name was changed to Minneapolis Industrial Ry. ~~in~~ September 18, 1959. In November, 1960, the Chicago & North Western Ry. acquired the M&StL Ry., which transaction included the M.I. Ry. 11-1-60

During June, 1967, operations ceased between Hutchinson and Gluek. Formal abandonment of the 104 miles of road from Parker's Lake to Gluek occurred in 1972. The remaining segment from Glenwood Junction was operated as the Golden Valley Subdivision of the Twin Cities Division, serving numerous on-line industries. Present switching service ends at the I494 highway bridge in Plymouth. The approximately 1.1 miles of track westward to Parker's Lake (M.P. 11) remained intact but unused for many years until removed about 1989-1990.

Hutchinson-Gluek
Frt service ended 1967 (late July?)
1970 Sought to abandon Plymouth
(MP11) to Hutchinson 48 miles 3-18-70
1972 formally abandoned
Plymouth-Gluek

Cargo Carriers Inc. is
Cargill's barge
transportation subsidiary.

ADDITIONS, CORRECTIONS, COMMENTS

Based on Gary Lenz' "The Minnesota Western Railroad" and H. Roger Grant's "Twilight Rails".

Corporate

Electric Short Line Railroad incorporated August 7, 1908 (MRR&WC records state August 10, 1908). On August 8, 1908, land was transferred to ESL RR from Minneapolis City Council, Phoenix Loan & Investment Company, John Reed, and Mr. & Mrs. Frank Reed. Phoenix Loan & Investment Co. was controlled by the Luce family and managed the finances of ESL RR.

John E. Luce was a brother of W. L. Luce. Born 10-27-1860 in Red Wing, Minn. Graduated from University of Pennsylvania with degrees in medicine and dentistry. His name was listed in the 1891 Grain Dealers and Shippers Gazeteer for the Great Northern Railway. He was president of the Hampshire Arms Hotel where he died March 21, 1943.

October 15, 1919: Electric Short Line Terminal Co. leased to the Electric Short Line Railway. But see the MN&S Ry. Master List of Contracts, Items 5 and 6: November 18, 1918, to November 18, 1921.

June 1920 MRR&WC report: ESL Railway is controlled by the Minnesota Construction Company through ownership of a majority of capital stock. The intermediary through which control was established was the Phoenix Loan & Investment Company.

Interurban Development Company was organized to promote traffic on the Electric Short Line Railway. (Frank Reed and Erle D. Luce were vice-presidents.) Sponsored sale of lots in Cosmos June 8, 1923.

June 23, 1923: ESL Railway board of directors ordered filing of a petition for receivership on behalf of the unsecured creditors. Management supported this action; a "friendly suit" to facilitate the calling in of the common stock of the ESL Railway. The common stock was given with each share of preferred stock bought and was counted as capital by the ICC. In order to build the extension west it was now necessary to reduce the capital stock. ESL Ry. needed to retire at least 80% of its common stock. Reorganization meant the common stockholders would lose their investment. Two receivers were appointed: Erle D. Luce and Willard J. Hield.

April 12, 1924: Special Master in Chancery Howard Abbott read the notice of sale. Minimum bid was $250,000. Only one prospective bidder met the qualifications and that was the Luce-controlled reorganization committee. Walter Thorpe acted for this committee and the made the sale offer of $275,000. Abbott declared the property sold. Ownership passed to the bondholders; both preferred and common stockholders were wiped out.

January 31, 1956: Minneapolis & St.Louis Railway purchased the Minnesota Western Railway capital stock for $300,000. Locomotives and rolling stock were not included. To be operated as a wholly-owned subsidiary. Minn. Western's net profit 1951-1955 averaged $93,639 annually. Incurred a net loss of $35,829 for 1957, the first full year under M&StL ownership.

September 8, 1959: name changed to Minneapolis Industrial Railway. Some industrial development was foreseen in Hutchinson and to a much greater extent at Golden Valley and Plymouth.

November 1, 1960: Chicago & North Western Transp. Co. acquired the Minneapolis & St.Louis Railway and with it came the Minneapolis Industrial Railway.

Track Construction

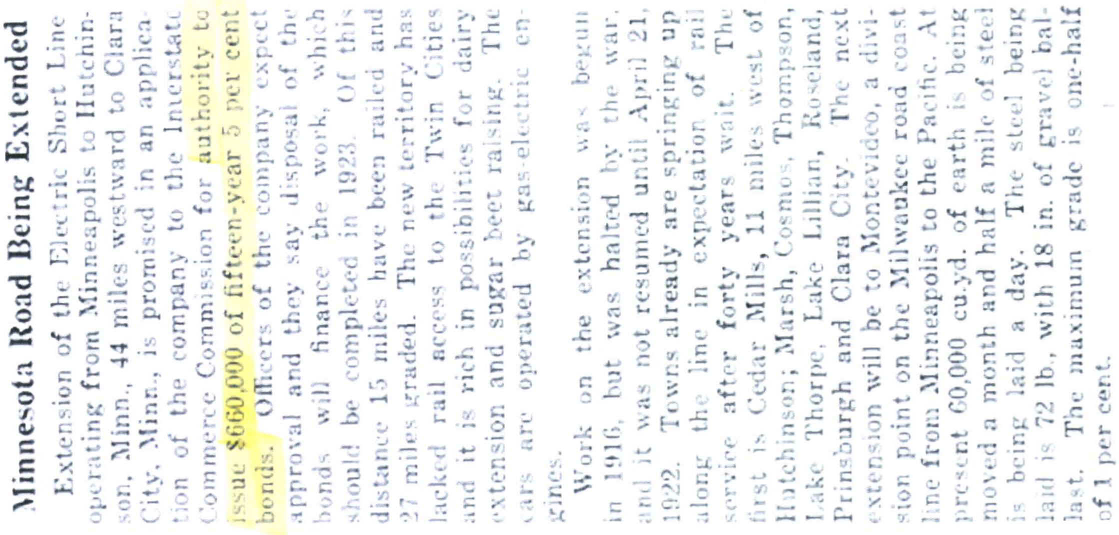
Hutchinson

1916: subsequently constructed 2.5 miles of side tracks and a wye.

Summer 1920: spur track to Hutchinson Brick & Tile Company.

Construction started May 1922 on extension from Hutchinson to Cosmos. Frederickson & Company, Minneapolis, won the contract. However see Electric Railway Journal article dated 11-19-1922 following which indicated construction resumed 4-21-1922.

ERJ 11-19-1922



Minnesota Road Being Extended

Extension of the Electric Short Line operating from Minneapolis to Hutchinson, Minn., 44 miles westward to Clara City, Minn., is promised in an application of the company to the Interstate Commerce Commission for authority to issue $660,000 of fifteen-year 5 per cent bonds. Officers of the company expect approval and they say disposal of the bonds will finance the work, which should be completed in 1923. Of this distance 15 miles have been railed and 27 miles graded. The new territory has lacked rail access to the Twin Cities and it is rich in possibilities for dairy extension and sugar beet raising. The cars are operated by gas-electric engines.

Work on the extension was begun in 1916, but was halted by the war, and it was not resumed until April 21, 1922. Towns already are springing up along the line in expectation of rail service after forty years wait. The first is Cedar Mills, 11 miles west of Hutchinson; Marsh, Cosmos, Thompson, Lake Thorpe, Lake Lillian, Roseland, Prinsburgh and Clara City. The next extension will be to Montevideo, a division point on the Milwaukee road coast line from Minneapolis to the Pacific. At present 60,000 cu.yd. of earth is being moved a month and half a mile of steel is being laid a day. The steel being laid is 72 lb., with 18 in. of gravel ballast. The maximum grade is one-half of 1 per cent.

Rail weights ranged from (1) 60# relay rail rolled in 1888 to (2) new 80# and 85# rail rolled from 1908 to 1914.

Gluek facilities: railroad employees installed a turntable, two-track carhouse/engine house, a fuel tank for the gas-electric cars, a small depot, and a bunkhouse for the crews. More construction occurred, including several stores and houses, a restaurant, a lumber yard, and a 30,000 bushel grain elevator owned by the Victoria Elevator Company (managed by Robert G. Cargill, Jr. (distantly related to the Cargill family of Minneapolis).

10-17-1953: a freight train derailed on the Lake Winsted trestle which destroyed the trestle. New roadbed and track was built around the south side of the lake; opened 10-27-1953.

Standard Oil Company built a large warehouse in Golden Valley during 1957. A 900 acre industrial park in Plymouth was advertised during 1959; November 1961: Minneapolis Industrial Railway is laying new track to serve the huge industrial park.

1992: Glenwood to Plymouth 7.4 miles, FRA Class 1, 70#-85# rail.

Operations

Mid October 1922: freight service began when track reached Acoma (5 miles west of Hutchinson). Heavy autumn rains prevented reaching Cosmos until second week of November 1922. First through freight train operated 12-21-1922. A few days later service was extended to Thorpe (4 miles west of Cosmos). Mixed train service from Hutchinson was provided. Left Hutchinson at 5:00 a.m., arrived at Thorpe two hours later. Left Thorpe at 5:30 p.m., arrived at Hutchinson two hours later. Scheduled stops were Acoma, Cedar Mills, Corvuso and Cosmos.

June 21, 1923: official opening of service to Lake Lillian.

October 24, 1927: trains began running to Gluek. Grand opening of sorts November 8, 1927, at Blomkest, Clara City, and Gluek.

In 1961 the C&NW cancelled regular service; instead extra trains were operated as needed.

Minnesota Western Transportation Company

Organized during 1924; proposed to offer connecting buses at Lake Lillian to points in western Minnesota and eastern South Dakota. Purchased 6 Fageol Chair Car Buses and 3 Reo Buses. Service was effective November 30, 1924. The MW RR provided two fast through trains daily between Minneapolis and Lake Lillian.

At the end of December 1924 the fleet of 6 Fageol Buses was sold to the Boulevard Transportation Company, Minneapolis. "The offer of BTC was so attractive that it was decided to accept at this time." The MW RR then adjusted its schedule to one daily train Minneapolis-Lake Lillian plus one daily train Minneapolis-Hutchinson.

10-30-1927: began a connecting bus and truck service from Gluek to Montevideo, Dawson and Canby. One daily bus run, using the Reo buses, was operated. Truck service was dispatched as needed.

MRR&WC Annual Reports

Electric Short Line Railway

Stubbs Bay to Winsted: 1st main track 22.52 miles, sidings 1.72 miles
  Permanent License 3-19-1915
Winsted to Hutchinson: 1st main track 17.682 miles, sidings 2.06 miles
  Temporary License 2-19-1916
  Permanent License 5-20-1916
Hutchinson to Cosmos: 1st main track 18.00 miles
  Inspected 12-8-1922
  Licensed 2-27-1923
Cosmos to Lake Lillian: 1st main track 8.34 miles
  Inspected 6-18-1923
  Licensed 8-17-1923

Minnesota Western Railroad

Lake Lillian to Gluek: 1st main track 30.76 miles, sidings 2.00 miles
Temporary License 10-4-1927
Permanent License 3-14-1928

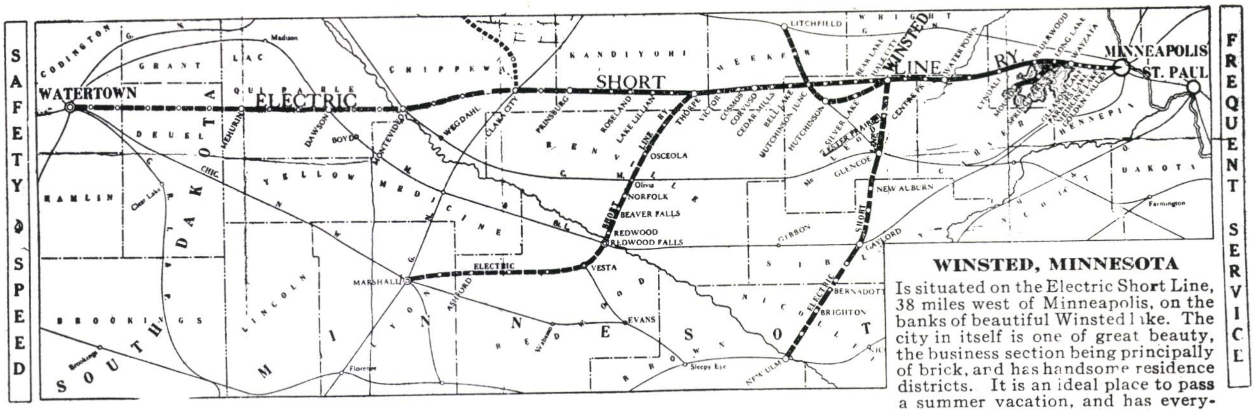
Year ended 12-31-1927: 31.48 miles of track added.
Years ended 12-31-1928 and 12-31-1929: 0.37 miles of track added.

12-31-1928: main line 112.22 miles, trackage rights 3.06 miles, total 115.28 miles.

Construction Costs
As reported to the
Minn. Railroad & Warehouse Commission

Electric Short Line Railroad (Electric Short Line Terminal Company)	
1. Minneapolis to Luce Line Junction	$ 882,468
Electric Short Line Railway	
2. Luce Line Jct. to Hutchinson	$1,639,006
3. Hutchinson to Lake Lillian	$ 476,231
Minnesota Western Railroad	
4. Lake Lillian to Gluek	$ 612,399
Total of 2. and 3.	$2,115,237
Total of 2., 3. and 4.	$2,727,636

WINSTED, MINNESOTA.


SAFETY & SPEED
FREQUENT SERVICE
WATERTOWN
ELECTRIC
SHORT
LINE
RY.
WINSTED
MINNEAPOLIS
ST. PAUL
MARSHALL
REDWOOD FALLS
NEW ULM
SOUTH DAKOTA
MINNESOTA

WINSTED, MINNESOTA

Is situated on the Electric Short Line, 38 miles west of Minneapolis, on the banks of beautiful Winsted lake. The city in itself is one of great beauty, the business section being principally of brick, and has handsome residence districts. It is an ideal place to pass a summer vacation, and has everything in that line that may be wished for. As a business center it is far superior to any town or city in this district, having many better and bigger business houses. It is taking on a gradual and steady growth, which will be hastened by the Electric Short Line.

THE CITY BY THE LAKE

Minnesota Western Railroad
Electric Short Line Terminal Company
Harry E. Pence
December 1, 1927 thru August 1, 1935

December 10, 1927, issue of Railway Age on page 1187: "Harry E. Pence secured control of....Minnesota Western Railroad and its affiliated company Electric Short Line Terminal Company on November 30 through the purchase of the interest of W. L. Luce." The Electric Railway Journal does not mention W. L. Luce. December 17,1927: "H. E. Pence, president of the Minneapolis, Northfield & Southern Railway, Minneapolis, Minn., has secured control of the Minnesota Western and the Electric Short LIne Terminal Company." December 24, 1927: "At a special meeting on December 5th H. E. Pence was elected president of the Minnesota Western Railroad and the Electric Short Line Terminal Company. He is president of the Minneapolis, Northfield & Southern, which recently acquired control of the two other companies. W. R. Stephens was made vice-president of the two lines, E. C. Bahr secretary-treasurer of the Minnesota Wesstern and F. C. Malcomson of the Electric Short Line Terminal Company."

This was a management change rather than an ownership change. The volumes of I.C.C. Finance Decisions do not contain any references to a change in ownership of the MW RR and ESLT Co. in 1927-1928. The MN&S Ry. had issued $600,000 in mortgage bonds and $250,000 in miscellaneous obligations during 1927 to finance construction of the Soo Line extension and to retire "floating debt" from the purchase of the railroad in 1918. The I.C.C. decisions indicate these funds were entirely for MN&S Ry. capital expenditures.

Harry Pence was an astute businessman; he also used the Pence Automobile Company to make his railroad investments. The Pence Automobile Co. owned 22,899 shares of the 22,986 shares of MN&S Ry. stock outstanding. They would not have made a cash investment in the nearly insolvent Minnesota Western Railroad. This management change was probably orginated by the bondholders/stockholders of the Minnesota Western in view of their financial inability to complete construction to Montevideo together with the MN&S success in completing the connection to the Soo Line Railroad.

Referring to the lists of Officers and Directors of the Minnesota Western Railroad note the differences between 1927 and 1928. Under Officers the four "Luce" persons were replaced by eight "MN&S" persons. However under Directors nine of the "Luce" group were replaced by nine new persons of which only two (Pence and Stephens) were of the MN&S. Two new directors, not directly connected with the MN&S, were added in 1930.

Referring to the lists of Officers and Directors of the Electric Short Line Terminal Co. note the differences between 1926 and 1927. Under Officers the four "Luce" persons were replaced by eight "MN&S" persons. However under Directors, five of the "Luce" group were replaced by four new persons, three of which (Pence, Stephens, Malcomson) were of the MN&S. Charles Gluek was the lone carry-over director. Two new directors, not directly connected with the MN&S, were added in 1929.

The Minnesota Western Railroad was placed in receivership 1-25-1932 and sold under foreclosure proceedings 9-12-1932 to the Pence Automobile Company for the upset price of $100,000. The Minnesota Western Railway was incorporated 10-3-1932 and acquired the railroad from the Pence Automobile Co. in exchange for all of the MW Railway capital stock ($100,000). This is from the I.C.C. records and does not appear in the MN&S Ry. Master List of Contracts.

The MN&S Ry. Master List of Contracts, number 228, is Pence Automobile Company acquisition of the capital stock of the Electric Short Line Terminal Co. August 1,1935.

OFFICERS AND DIRECTORS
Minnesota Railroad & Warehouse Commission
Annual Reports

Electric Short Line Railway

Directors

William L. Luce	1914-1920
Erle D. Luce	1914-1921
Severn S. Solverson	1914-1920

Beginning in 1917 the board of directors was greatly enlarged so as to include persons from various cities and towns along the line. The three persons listed foregoing are included in the totals following. 1917: a total of 26 directors (for a list see 1918 volume, page 470). 1918: a total of 25 directors. 1919-1920: a total of 27 directors. In 1921 there were just two directors: the two receivers, Willard J. Hield and Erle D. Luce.

Officers

William L. Luce	president, treasurer	1914-1921
Erle D. Luce	first vice president	1914-1921
Severn S. Solverson	secretary	1914-1921
DeKoven Hunter	general manager	1914-1917
R. C. Jones	auditor	1916
	traffic manager	1916-1917
	general manager	1918-1919
	controller	1921-1923
John Westerdahl	chief engineer	1914-1916
John B. Finnegan	superintendent of motive power	1914-1916

Minnesota Western Railroad

Directors

William L. Luce	Minneapolis	1924-1927	
Erle D. Luce	Minneapolis	1924-1927	
Severn S. Solverson	Minneapolis	1924-1927	
Williard J. Hield	Minneapolis	1924-1927	
W. H. Kemp	Hutchinson	1924-1927	
C. E. English	Minneapolis	1924-1927	
Walter Thorpe	Minneapolis	1924-1927	
M. H. Boutelle	Minneapolis	1924-1927	
O. L. Danck	Silver Lake	1924-1927	
W. E. Harrington	Hutchinson	1924-1929	
J. J. Ponsford	Watertown	1924-1931	
C. E. Kester	Hutchinson	1924-1931	
Robert C. Cargill	Minneapolis	1924-1931	
Charles Gluek	Minneapolis	1924-1931	born 1860 V.P. Gluek Brewing Co.
Harry E. Pence, Sr.	Minneapolis	1928-1931	
W. R. Stephens	Minneapolis	1928-1931	
F. C. Bahr	Minneapolis	1928-1931	
T. W. Lewis	Minneapolis	1928-1931	
H. H. Sivright	Minneapolis	1928-1931	
R. K. Smith	Minneapolis	1928-1931	

M. S. Carl	Clara City	1928-1929
E. J. Sterns	Hutchinson	1928-1931
E. B. Cosgrove	LeSeuer	1928-1931
H. M. Baskerville	Minneapolis	1930-1931
W. R. Hefley	Minneapolis	1930-1931

Officers
(Biennial Reports)

1924-1926

William L. Luce, president; Erle D. Luce, vice president and general manager; Severn S. Solverson, secretary and treasurer; E. L. Benner, general auditor.

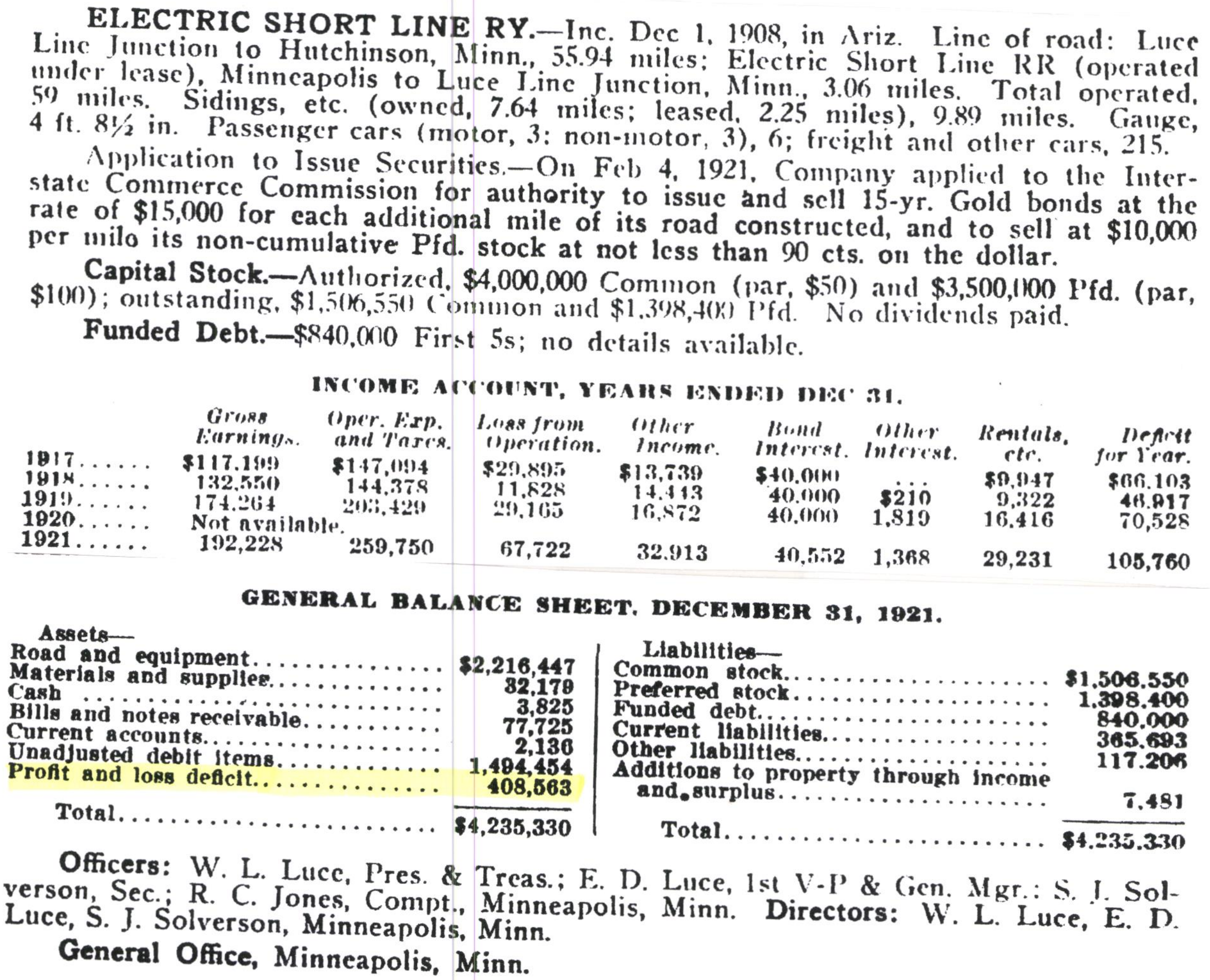
1927-1931

Harry E. Pence, Sr., president; W. R. Stephens, vice president; F. C. Bahr, secretary and treasurer; W. B. Granger, general auditor; Grant L. Martin, general attorney; G. C. Wright, traffic manager; P. H. Smith, general superintendent; W. H. Krumpelman, superintendent of motive power.

1927-1929

M. J. Dooley, general manager; R. C. Smith, chief engineer.

It should be noted that officers and directors were not listed in annual reports after 1931.



ELECTRIC SHORT LINE RY.—Inc. Dec 1, 1908, in Ariz. Line of road: Luce Line Junction to Hutchinson, Minn., 55.94 miles; Electric Short Line RR (operated under lease), Minneapolis to Luce Line Junction, Minn., 3.06 miles. Total operated, 59 miles. Sidings, etc. (owned, 7.64 miles; leased, 2.25 miles), 9.89 miles. Gauge, 4 ft. 8½ in. Passenger cars (motor, 3; non-motor, 3), 6; freight and other cars, 215.

Application to Issue Securities.—On Feb 4, 1921, Company applied to the Interstate Commerce Commission for authority to issue and sell 15-yr. Gold bonds at the rate of $15,000 for each additional mile of its road constructed, and to sell at $10,000 per mile its non-cumulative Pfd. stock at not less than 90 cts. on the dollar.

Capital Stock.—Authorized, $4,000,000 Common (par, $50) and $3,500,000 Pfd. (par, $100); outstanding, $1,506,550 Common and $1,398,400 Pfd. No dividends paid.

Funded Debt.—$840,000 First 5s; no details available.

INCOME ACCOUNT, YEARS ENDED DEC 31.

	Gross Earnings.	*Oper. Exp. and Taxes.*	*Loss from Operation.*	*Other Income.*	*Bond Interest.*	*Other Interest.*	*Rentals, etc.*	*Deficit for Year.*
1917......	$117,199	$147,094	$29,895	$13,739	$40,000			
1918......	132,550	144,378	11,828	14,443	40,000	...	$9,947	$66,103
1919......	174,264	203,429	29,165	16,872	40,000	$210	9,322	46,917
1920......	Not available.					1,819	16,416	70,528
1921......	192,228	259,750	67,722	32,913	40,552	1,368	29,231	105,760

GENERAL BALANCE SHEET, DECEMBER 31, 1921.

Assets—		**Liabilities—**	
Road and equipment..............	$2,216,447	Common stock......................	$1,506,550
Materials and supplies............	32,179	Preferred stock......................	1,398,400
Cash	3,825	Funded debt.........................	840,000
Bills and notes receivable.........	77,725	Current liabilities....................	365,693
Current accounts....................	2,136	Other liabilities......................	117,206
Unadjusted debit items............	1,494,454	Additions to property through income and surplus..................	7,481
Profit and loss deficit...............	408,563		
Total......................................	$4,235,330	Total.................................	$4,235,330

Officers: W. L. Luce, Pres. & Treas.; E. D. Luce, 1st V-P & Gen. Mgr.; S. J. Solverson, Sec.; R. C. Jones, Compt., Minneapolis, Minn. **Directors:** W. L. Luce, E. D. Luce, S. J. Solverson, Minneapolis, Minn.

General Office, Minneapolis, Minn.

SELECTED COMMENTS ON THE
ELECTRIC SHORT LINE TERMINAL COMPANY
ELECTRIC SHORT LINE RAILWAY
FROM THE INTERSTATE COMMERCE COMMISSION VALUATION
AS OF JUNE 30, 1920

ELECTRIC SHORT LINE TERMINAL COMPANY
ELECTRIC SHORT LINE RAILROAD CO.

Electric Short Line Railroad Co. incorporated 8-7-1908 in Minnesota; organized 8-10-1908. Name changed 5-6-1915 to Electric Short Line Terminal Co. J. E. Luce owned 46% of the capital stock.

Much of the right-of-way was acquired by an affiliated company, Phoenix Loan & Investment Company, several years prior to actual construction for the purpose of concealing its intention to build a terminal railroad in Minneapolis. Much of the land was purchased before the deeds were recorded. Cost $332,645.

Prior to 1912 the Phoenix Land & Investment Co. (controlled by the Luce interests) constructed for the Electric Short Line Railroad Co. about 8 miles of road, and partially constructed 25 miles of road west of Minneapolis, all of which was sold to the Electric Short Line Railway.

The road from Luce Line Junction to 3rd Ave. N. and 7th St. N., Minneapolis, was constructed originally in 1913 as a single-track line by Phoenix Loan & Investment Co. acting as agent for the Electric Short Line Railroad. It was acquired, together with certain miscellaneous physical property, in consideration for the entire issue of capital stock ($2,500,000) of the Electric Short Line Railroad.

The Electric Short Line Terminal Company's finances were managed by the Phoenix Loan & Investment Co. from 1908 to the date of the ICC valuation.

In 1914 the Minneapolis, St.Paul, Rochester & Dubuque Electric Traction Company, in part consideration for trackage rights into Minneapolis, constructed the second main track, 3.056 miles, completed about 7-30-1915.

First main track 3.336 miles, second main track 3.056 miles, subtotal 6.392 miles, plus sidings and yard tracks 4.159 miles = total track 10.551 miles.

Grading was comparatively heavy, about 25,000 cubic yard per mile of common excavation.
The bridge over the Great Northern Railway at Holden St. was 207 l.f. long, double track, consisting of one 135 l.f. through-truss and one 72 l.f. through-plate girder span on one concrete abutment, one steel bent, and four concrete pedestals.
Cross ties about 2,600 per mile, untreated tamarack and cedar. Main track was new 80# rail, with gravel ballast.

Combination brick depot and office building is jointly owned with Minneapolis, Northfield & Southern Railway.

Investment in Road and Equipment: Additions and Betterments of $116,393.16 represents expenditures by M.StP.R.&D.E.T.Co. in construction of the second main track for ESL Term. Co. in consideration of trackage rights.

Original Cost items: Land $18,750, owned jointly and used jointly. Miscellaneous Physical Property $11,921.83, one-half cost of construction of passenger station.

Trackage Rights:
Electric Short Line Railway: 3.06 miles double-track main line plus 4.159 miles sidings and yard tracks, Minneapolis to Luce Line Jct. Agreement dated 10-15-1919, indefinite term, rental $2,000 per month.
Minneapolis, Northfield & Southern Railway: 3.06 miles main line plus 4.159 miles sidings and yard tracks, Minneapolis to Luce Line Jct. Agreement dated 11-18-1918, indefinite term, 75¢ per car or engine, minimum payment $300 per month.

Interchange connections:
Minneapolis: Chicago, Burlington & Quincy Railroad, Great Northern Railway.
Luce Line Jct.: Electris Short Line Railway, Minneapolis Northfield & Southern Railway.

ELECTRIC SHORT LINE RAILWAY CO.

Incorporated in Arizona 12-1-1908, corporate office at Phoenix, general accounting office at Minneapolis. Controlled by Minnesota Construction Company thru ownership of a majority of the capital stock. Intermediary thru which control was established was the Phoenix Loan & Investment Company. The latter two companies are controlled by the Luce interests of Minneapolis.

Some 8 miles were sufficently completed that rails had been laid thereon and some 25 miles partially constructed prior to 1912, either by or thru the Phoenix Loan & Investment Co. for account of the Electric Short Line Railroad Co.. This particular property was either acquired directly by the Electric Short Line Railway Co., or the contract therefor was assigned to it. Constructed jointly by H. F. Balch & Company and others under contract, and partly by company forces.

Construction Record

Luce Line Junction to Parkers Lake	6.94 miles	June 1909 to 1-19-1914
Parkers Lake to Stubbs Bay	7.78 miles	April 1913 to 6-2-1914
Stubbs Bay to Winsted	22.44 miles	October 1914 to 2-13-1915
Winsted to Hutchinson	17.24 miles	August 1915 to 2-28-1916
Total	54.40 miles	

First 30 miles is rather rough country with many curves and heavy grades. Remainder is slightly undulating with few curves and light grades. The Crow River is crossed at Watertown and a lake about 800 ft. wide is crossed at Winsted. Grading is comparatively heavy, all common excavation, about 24,000 cubic yards per mile. The only steel bridge is the crossing of the Great Northern Railway 12 miles west of Luce Line Junction, which is a 120 l.f. truss span on two concrete abutments. Trestles are quite numerous: used in crossing bays along lakes and marshy places. Crossties: about 3,100 per mile, untreated tamarack and cedar. Rail in main track is 60# to 80#, most of which is relay rail. Gravel ballast.

The property was purchased from the Electric Short Line Railroad or Phoenix Loan & Investment Company as agent for the company, by the issuance of $7,500,000 par value of capital stock. However $6,861,500 in stock was returned by the ESL Railroad in consideration for the exclusive right to locate all stations and to acquire all land for townships along the line of railroad.

Net to ESL Railroad	$ 638,500
Resold	1,188,100
Given as bonuses with Preferred Stock	1,080,250
Total Outstanding	2,906,850

Costs of $36,437.78 were incurred during 1916 on an extension west of Hutchinson of which construction was discontinued during the fall of that year. Construction not resumed as of 6-30-1920.

Has joint use of a freight depot as Minneapolis owned by T. B. Walker. Owns its station facilities at Hutchinson.

Track mileage:

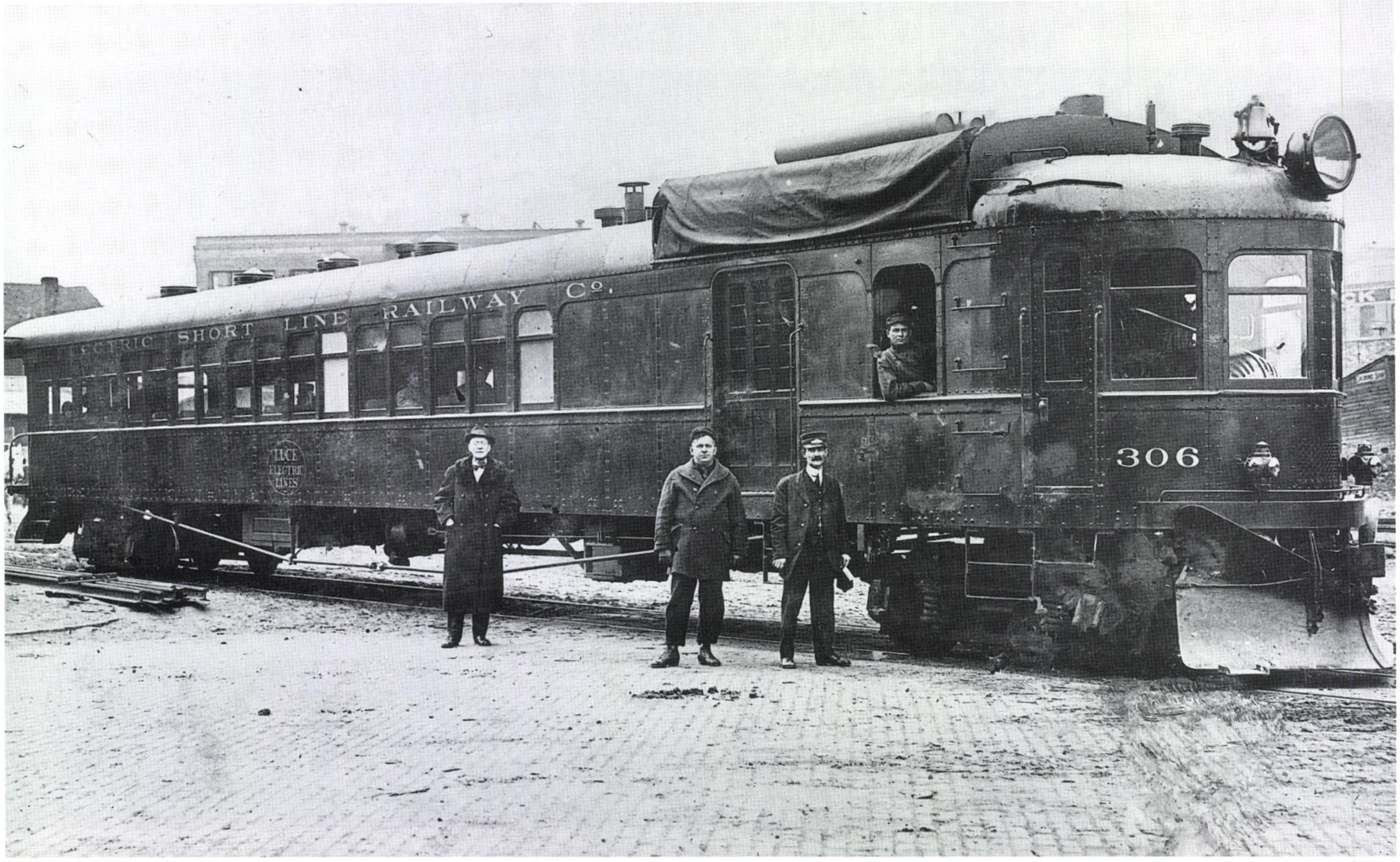
Luce Line Junction to Hutchinson	55.133 miles
Sidings and Yard tracks	7.931 miles
Total	63.064 miles

Funded Debt: 1st Mortgage 5% Bonds dated 9-15-1916 due 7-1-1931 of $800,000 were issued in partial settlement of advances by J. E. Luce and the Phoenix Loan & Investment Co. at a recorded value of $640,000. (Discount $160,000.) Nonnegotiable Debt to Affiliated Companies $945,494.37 to Phoenix Loan & Investment Co. or to J. E. Luce, was classified as Open Accounts, all of which has been repaid, $640,000 of which by these mortgage bonds.

February 1914 thru 6-30-1920: as of 6-30-1920, Profit & Loss Account included $30,279.37 insurance received on equipment destroyed by fire in previous year.

Equipment:

Steam Locomotives	3	
Steam Locomotive	1	inventoried but not reported
Freight Cars	180	
Passenger Cars	23	
Passenger Cars	1	inventoried but not reported
Work Cars	18	
Miscellaneous Cars	2	



ELECTRIC SHORT LINE RAILWAY CO.

I.C.C. Finance Docket #953 Decided 10-18-1920

The ESL Ry. applied to the I.C.C. 5-10-1920 for a loan of $42,250 from the United States in accordance with Section 210 of the Transportation Act, 1920. Application amended 9-22-1920.

Purpose: additional equipment and making additions and betterments to equipment, way and structures , at a total estimated cost of $83,000. Security: applicant's promissory note secured by a mortgage or deed of trust covering the equipment purchased and rebuilt.

Applicants owns and operates 54.5 miles of main line track and 8.05 miles of sidings. Minneapolis to Hutchinson.

No station on its line is at a greater distance than 6 or 7 miles from another existing carrier; the average distance being between 4 and 5 miles. The actual Net Income for the years 1916 thru 1919 was a deficit each year. The effect upon Net INcome of the increased ratesd authorized by I.C.C.'s "Increased Rates, 1920" was a deficit in each year 1916 thru 1919. The effect of the recent wage award of the Railroad Labor Board was not reflected in these figures.

The prospective earning power of the applicant and the character and value of the security offered do not afford reasonable assurance of the applicant's ability to repay the loan. Application denied.

I.C.C. Finance Docket #1221 Decided 5-23-1921

Submitted 5-16-1921. Authority granted to sell $40,000 of First Mortgage 5% 15-year Gold Bonds at par, the proceeds to be devoted to extension of applicant's line of railway.

Cnstruction of an extension approximately 52 miles westward from Hutchinson to Clara City (on the Great Northern Railway) was begun during 1916. During the war the work was suspended. Prior to 5-28-1920 about 4.5 miles of line had been graded of which 1.5 miles had been ballasted and rails laid. Total expenditures amounted to about $35,000. The proceeds of the bonds now for sale will be used in completing the 4.5 miles partially constructed.

First Mortgage 5% 15-year Gold Bonds dated 9-15-1916 to the Minnesota Loan & Trust Company of Minneapolis (trustee) authorized issuance of $840,000 of bonds, payable 7-1-1931, plus $15,000 more (and $10,000 of capital stock) for each additional mile of completed railway. $800,000 were sold and outstanding. $40,000 were retained in the applicant's treasury. These are now to be sold. The present holders of the outstanding bonds have agreed to purchase the retained bonds at par and there will be no expense connected with the sale.

Applicant has not been successful in earning its fixed charges and has a large debit balance in the Profit & Loss Account. It is not be anticipated that this condition will change in the near future, but the proposed completion of a partly-built extension may somewhat improve its financial situation.

NOTE: The Minnesota Railroad & Warehouse Commission Annual Report for the year **1921** lists, under Officers, only two **Receivers**, Erle Luce and Willard Hield.

INTERSTATE COMMERCE COMMISSION
DECISIONS

Finance Docket 2604
Electric Short Line Railway Bonds
Decided 1-31-1923

Application filed 10-12-1922 and amended 12-9-1922 and 1-11-1923 for authority to issue $342,000 of its 5% 15-year first mortgage gold bonds, at par, to W. L. Luce, J. E. Luce, E. D. Luce and Hazel Luce in payment of advances previously made by them, and not exceeding $25,000 of like bonds, at par, to E. D. Luce in payment for advances which hereafter may be made by him.

Construction of the extension west of Hutchinson had been resumed and that todate 22 miles had been completed and six miles had been graded for which ties and rails are now on the ground. On account of weather conditions the six miles partially constructed may not be completed until the spring. As of 1-8-1923 $438,467 had been expended for construction, funds provided by:

Sale November 1916 of $70,000 mortgage bonds at 80% of par	$ 56,000
Sale September 1921 of $40,000 mortgage bonds at par	40,000
Cash advanced by W. L. Luce	27,500
Cash advanced by J. E. Luce	63,400
Cash advanced by E. D. Luce	106,668
Cash advanced by Hazel B. Luce	144,732
Total	438,300

Of the $342,300 advanced by the Luces, $141,900 was represented by promissory notes, and $200,400 on open account. It was thought that it would be necessary to obtain an additional $25,000 to complete the six miles partially constructed for which E. D. Luce had agreed to advance this amount.

The I.C.C. approved issuance of first mortgage bonds, at par, in the amount of $342,000 in settlement of the obligations, plus $25,000, at par, to complete the construction.

Note: the total mortgage bonds outstanding would now be $1,207,000 ($840,000 previously issued plus $367,000 this issue. This total agrees with the 1924 financial statements.

Finance Docket 4043 and 4163
Acquisition of Line and Issue of Securities by Minnesota Western Railroad Company
Decided 9-10-1924

The application to acquire the Electric Short Line Railway was filed 5-16-1924. The application to issue securities was filed 6-21-1924. Both were under the plan of reorganization dated 12-5-1923. At this time the line extended from Minneapolis (Luce Line Jct.) to Lake Lillian, 85 miles.

ESL Ry. had outstanding $1,207,000 of 15-year 5% first mortgage bonds. It appeared that payment of interest was in default on:

$412,500	since 7-1-1917
427,500	since 1-1-1918
840,000	total

On 6-23-1923 the U.S. District Court appointed Willard J. Hield and Erle D. Luce Receivers on behalf of ESL Ry.'s creditors. Thereafter the Minnesota Loan & Trust Co. brought suit in that court for foreclosure of the mortgage.

On 12-5-1923 a plan of reorganization of the ESL Ry. was promulgated by a reorganization committee and the bondholders, under which $1,136,500 (about 94.1%) of the total outstanding were deposited. Under the decree of foreclosure and the sale the properties of the ESL Ry. were offered for sale 4-14-1924 by the Special Master appointed by the court, and were bid in for $275,000 by the reorganization committee on behalf of the bondholders of the deposited bonds.

The Minnesota Western Railroad Company was incorporated 4-25-1924 under the laws of Delaware with authorized capital stock of $1,500,000 (all preferred) (15,000 shares at $100 par value).

Out of the purchase price of $275,000 the district court authorized payment of:

$153,417 for allowances to the Receivers and their counsel, operating obligations of the Receivers and Receivers Certificates, Trustees services and fees of counsel, and compensation of the Special Master.

121,583 for distribution to the bondholders.

The mortgage bonds deposited with the reorganization committee totaled:

principal amount	$1,177,785
accrued interest	268,905
total	1,446,690

The $1,500,000 issue of preferred stock (7%, non-cumulative) was authorized to cover this amount.

In addition the reorganization committee had raised:

$122,588	for current advances,
2,007	for miscellaneous advances for reorganization expenses, compromise of preferred claims, etc.,
10,405	for defraying Receivers' obligations,
$135,000	total.

The I.C.C. authorized issuance of $135,000 of first mortgage, 6%, 30-year, gold bonds, Minnesota Loan & Trust Company, Trustee, to cover this amount. The mortgage was dated 5-12-1924. The bonds were to be dated 6-1-1924, maturing 6-1-1954.

Finance Docket #15701

This was a dispute with the Atchison, Topeka & Santa Fe Railway over a division of rates. The original complaint was filed 2-29-1924 by the Electric Short Line Railway, and amended 6-26-1924 to include the Minnesota Western Railroad. The case was decided by the I.C.C. 3-13-1926 in favor of the Minnesota Western granting a 20% increase in their division of the rates. The text of the case included some interesting information which is presented below.

Operation was from Luce Line Junction to Lake Lillian, 82.4 miles. The railroad owned 210 freight cars, 18 passenger cars (4 gasoline-electric motor cars), and 4 steam locomotives. Trackage rights over the Electric Short Line Terminal Co. were (1) $2.60 per round trip for each car, and (2) $5,20 per round trip for each locomotive.

Industries located on the railroad included grain elevators, coal and lumber yards, and canning factories. Served nine small towns; principal stations were Hutchinson and Silver Lake. Originating traffic was mostly grain, hay, and drain tile. Inbound traffic (other than LCL) consisted of lumber, coal, cement, drain tile, stone, sand, and petroleum products. Average haul was 37.91 miles.

1923 freight traffic: 1,898 carloads originating and 1,137 carloads received. Estimated that 55% of the freight revenue was derived from local traffic and 45% from interline traffic. 10% of the interline traffic originated on its line, and 90% on other lines.

Finance Docket 5134
Proposed Extension by Minnesota Western Railroad
Lake Lillian to Montevideo
Decided 6-19-1926

Application filed 10-14-1925 for an extension from Lake Lillian thru Montevideo to Dawson, 57 miles. Submitted to the commissioners 4-30-1926. The decision stated that public convenience and necessity was NOT shown to require construction of that segment between Montevideo and Dawson. The application was opposed by the Great Northern Railroad, Chicago Milwaukee & St.Paul Railway, and Minneapolis & St.Louis Railroad.

It was noted that the Minnesota Western Railroad and Electric Short Line Terminal Company had the same stockholders and the same officers, both controlled by the Luce family.

Information from the application follows.
The proposed line would connect with:
  Great Northern (Sioux City line) at Clara City (1920 population 750)
  Milwaukee Road (main line) at Montevideo (1920 population 4,419)
  Mpls. & St.Louis at Dawson (1920 population 1,511).
The construction cost estimate:

Lake Lillian to Montevideo	43 miles	$666,500
Lake Lillian to Dawson	57 miles	$963,300

  The cost would be financed by issuing 6% mortgage gold bonds at the principal amount of $20,000 per mile of road completed.
Construction would start 5-1-1926 and reach
  Clara City during 1926
  Montevideo during 1927
  Dawson during 1928.
It was still the intention to eventually reach Brookings, South Dakota.

Minnesota Western Railroad owned 4 steam locomotives and 5 gasoline-electric passenger cars. Tri-weekly steam service in each direction is provided to handle carload freight. One locomotive is kept under steam for this purpose and to switch freight on Electric Short Line Terminal Company's line three times per week between runs. The gasoline-electric motor cars were used for passenger train service and to give daily LCL freight service. A freight car was attached to the motor car. Passenger service consisted of two trains each way daily between Minneapolis and Lake Lillian, and three trains daily each way between Minneapolis and Hutchinson.

The I.C.C. approved construction from Lake Lillian to Montevideo but noted the following. "Successive extensions of unprofitable roads in order to save them may lead to wasteful construction and greater abandonments. Extension of this line as far west as Montevideo should place the applicant in a position to enjoy a maximum haul on traffic originating on its line and on the Electric Short Line Terminal Co.'s line, and would tend to strengthen a very weak carrier performing an important public service."

There was a subsequent extension of the start of construction to on or before 12-31-1926 with completion on or before 12-31-1927.

Finance Docket 5366
Minnesota Western Railroad
Decided 7-8-1926

Authority granted to issue $660,000 first mortgage 6% 30-year gold bonds, to be sold at not less than par and accrued interest to finance construction of 43 miles of line from Lake Lillian to Montevideo. Issued pursuant to the first mortgage 6% 30-year dated 5-12-1924, Minnesota Loan & Trust Company, Trustee. Applicant proposes to sell bonds to its stockholders, directors, and persons along its line, at par value and accrued interest.

Finance Docket 9722
Minnesota Western Railway Acquisition
Decided 1-16-1933

Authorized the Minnesota Western Railway Company to acquire and operate the line of railroad formerly owned and operated by the Minnesota Western Railroad Company.

Application filed 11-14-1932 for authority to:
1. acquire and operate the line of railroad from Glenwood Jct. to Gluek, 111.7 miles;
2. operate over Electric Short Line Terminal Company from Glenwood Jct. to Minneapolis, 3 miles.

The extension authorized 6-19-1926 from Lake Lillian to Montevideo was never fully completed; ended at Gluek.

1927 3,134 carloads, 1928 3,964 carloads, 1929 5,204 carloads, 1930 5,527 carloads, 1931 3,335 carloads and first eight months of 1932 1,607 carloads.

Minnesota Western Railroad was placed in receivership 1-25-1932. Sold under foreclosure proceedings 9-12-1932 to the Pence Automobile Company for $100,000. Minnesota Western Railway was incorporated 10-3-1932.

Finance Docket 9723
Minnesota Western Railway Company Stock
Decided 2-2-1933

Applied 11-14-1932 for authority to issue $100,000 of common stock (1,000 shares, par value $100 each). Decree of foreclosure and sale by U.S. District Court 4-16-1932, the properties of the Minnesota Western Railroad were sold 8-22-1932 to the Pence Automobile Company for the upset price of $100,000. The sale was confirmed 9-16-1932.

Minnesota Western Railway Company was incorporated 10-3-1932 under the laws of Delaware. Pence Automobile Company offered to sell the properties to Minnesota Western Railway for $100,000 of the applicant's common stock.

Pro Forma Balance Sheet 9-13-1932

Investment in Road and Equipment	$100,003	Proposed Capital Stock	$100,000
Misc. Physical Property	1,153	Deferred Liabilities	2,312 *
Materials and Supplies	1,156		
	102,312		102,312

* Deferred installments and special assessment taxes on property included in Road and Equipment account

Finance Docket 10731
Minnesota Western Railway Company Reconstruction Loan
Decided 4-30-1935 Denied

Application filed 1-10-1935 to the Reconstruction Finance Corporation for a loan of $35,000 to be used for maintenance of way and structures. Approval of the I.C.C. was a condition precedent; approval was denied. Interesting comments from their investigation are noted following.

Railroad comprises 111.7 miles of main track, with total track of 121.3 miles. Equipment consists of four motor passenger cars and 37 other cars.

Principal commodities carried during 1933 were: livestock 984 carloads, grain 687 carloads, coal and coke 476 carloads, oil 286 carloads and sugar beets 122 carloads. Merchandise freight amounted to 4,870,679 pounds. The industries served included 21 bulk-oil plants, 11 grain elevators, 9 lumber yards, 5 fuel yards, 10 stockyards, 2 canning works, a workhouse, an establishment of greenhouses, a hemp works, a pickle plant, and a silo works.

The applicant has no funded debt and property is free and clear of all liens. The applicant has issued 1,000 shares of common stock (par value $100 each), its entire capitalization. The Pence Automobile Company owns 98.60% of this stock.

[Mentions Thrall, West & Company of Minneapolis, successors to the securities department of the former Minnesota Loan & Trust Company. Northwestern National Bank & Trust Company elsewhere was mentioned as the successor the Minnesota Loan & Trust Company.]

The applicant did not pay any salaries to its executives and officers, having a common management with the Minneapolis, Northfield & Southern Railway. For the sum of $500 per month the applicant receives the services of executives and officers, accounting department, law and claim department, superintendence, dispatching of trains at Minneapolis, and local agent's office at Minneapolis.

A statement has been furnished showing the average annual carloadings of grain, livestock, sugar beets, and canned goods during the years 1924-1933, and the carloads of the same commodities handled in 1934. This discloses a very large loss of traffic and shows that even a partial recovery of the former business would greatly benefit the carrier.

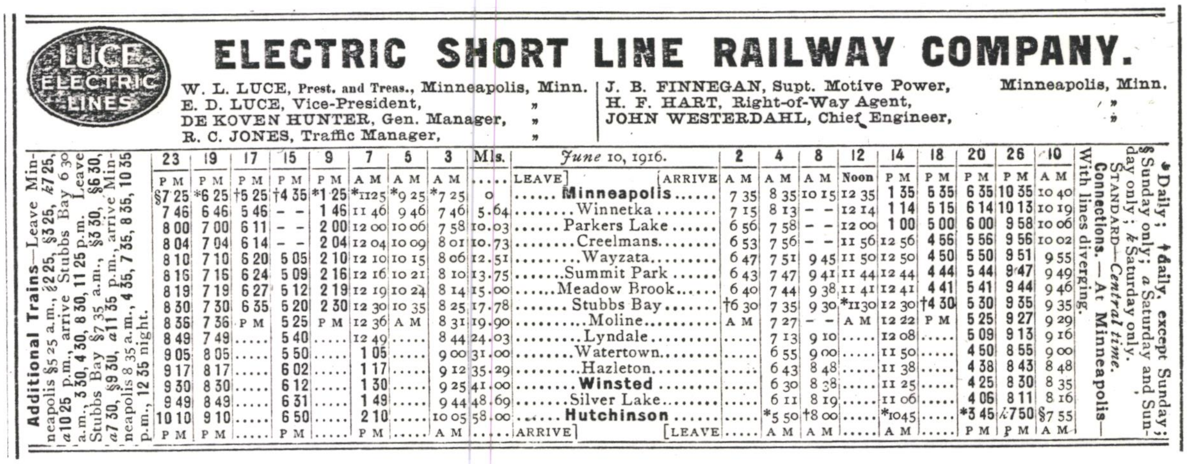
The margin of safety [financia] is evidently slight and the applicant's ability to operate at a profit must be regarded as highly uncertain.

ELECTRIC SHORT LINE / MINNESOTA WESTERN RAILROAD TRACK, FACILITIES, AND OPERATIONS

ELECTRIC SHORT LINE RAILWAY			
TRACK MILEAGE			
	6/30/1915		6/30/1916
	Luce Line Jct		Luce Line Jct
	to Winsted		to Hutchinson
First Main Track	37.16		55.94
Sidings	4.25		10.08
	41.41		66.02
Operated under Contract:			
First Main Track	3.06		3.06
Second Main Track	3.00		3.06
	6.06		6.12
Totals	47.47		72.14
	Miles of	Trackage	Total
Dec. 31	Road	Rights	Operated
1922	72.40	3.06	75.46
1923-1926	80.74	3.06	83.80
1927-1928	112.22	3.06	115.28
1929-1932	112.59	3.06	115.65
1933	111.70	3.06	114.76
1934-1937	111.70	3.32	115.02

ELECTRIC SHORT LINE RY.
MINNESOTA WESTERN RAILROAD
Minnesota Railroad & Warehouse Comm. Approvals

	Inspected Licensed	Main	Sdgs	Total
7th & Holden Sts. to 72+63	1-15-14	3.34	.72	4.06
72+63 to 842+36	1-15-14, 3-24-14 and 6-20-14	14.50	2.15	16.65
Stubbs Bay to Winsted	2-08-15	22.52	1.72	24.24
Winsted to Hutchinson	2-17-16	17.68	2.06	19.74
Hutchinson to Cosmos 3951+50.7	12-08-22 2-27-23	00 18.??		?
3951+50.7 to Lake Lillian 4391+85	6-18-23 8-17-23	8.34	?	?
4391+85 to Gluek 6015+98	10-03-27 3-14-28	30.76	2.00	32.76



ELECTRIC SHORT LINE RAILWAY COMPANY.

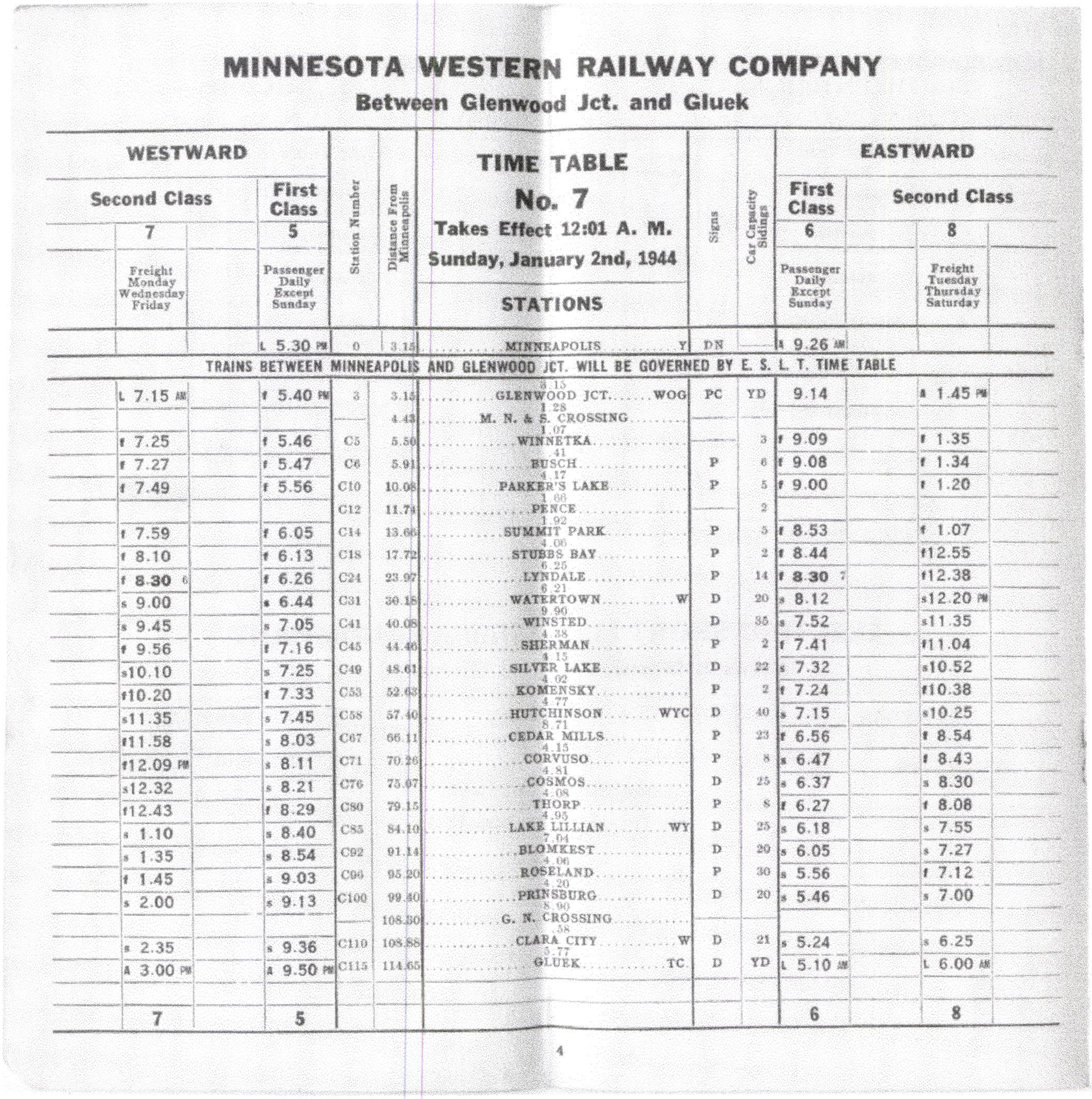
W. L. LUCE, Prest. and Treas., Minneapolis, Minn.
E. D. LUCE, Vice-President, "
DE KOVEN HUNTER, Gen. Manager, "
R. C. JONES, Traffic Manager, "

J. B. FINNEGAN, Supt. Motive Power, Minneapolis, Minn.
H. F. HART, Right-of-Way Agent, "
JOHN WESTERDAHL, Chief Engineer, "

23	19	17	15	9	7	5	3	Mls.	*June* 10, 1916.	2	4	8	12	14	18	20	26	10
P M	P M	P M	P M	P M	A M	A M	A M	.....	LEAVE] [ARRIVE	A M	A M	A M	Noon	P M	P M	P M	P M	A M
§7 25	*6 25	†5 25	†4 35	*1 25	*11 25	*9 25	*7 25	0	...... **Minneapolis**	7 35	8 35	10 15	12 35	1 35	5 35	6 35	10 35	10 40
7 46	6 46	5 46	- -	1 46	11 46	9 46	7 46	5.64	........Winnetka........	7 15	8 13	- -	12 14	1 14	5 15	6 14	10 13	10 19
8 00	7 00	6 11	- -	2 00	12 00	10 06	7 58	10.03	......Parkers Lake......	6 56	7 58	- -	12 00	1 00	5 00	6 00	9 58	10 06
8 04	7 04	6 14	- -	2 04	12 04	10 09	8 01	10.73	........Creelmans........	6 53	7 56	- -	11 56	12 56	4 56	5 56	9 56	10 02
8 10	7 10	6 20	5 05	2 10	12 10	10 15	8 06	12.51	.........Wayzata.........	6 47	7 51	9 45	11 50	12 50	4 50	5 50	9 51	9 55
8 16	7 16	6 24	5 09	2 16	12 16	10 21	8 10	13.75	.......Summit Park......	6 43	7 47	9 41	11 44	12 44	4 44	5 44	9 47	9 49
8 19	7 19	6 27	5 12	2 19	12 19	10 24	8 14	15.00	......Meadow Brook......	6 40	7 44	9 38	11 41	12 41	4 41	5 41	9 44	9 46
8 30	7 30	6 35	5 20	2 30	12 30	10 35	8 25	17.78	.......Stubbs Bay.......	†6 30	7 35	9 30	*11 30	12 30	†4 30	5 30	9 35	9 35
8 36	7 36	P M	5 25	P M	12 36	A M	8 31	19.90	.........Moline.........	A M	7 27	- -	A M	12 22	P M	5 25	9 27	9 29
8 49	7 49	.....	5 40	.....	12 49	.....	8 44	24.03	.........Lyndale.........	.....	7 13	9 10	.....	12 08	.....	5 09	9 13	9 16
9 05	8 05	.....	5 50	.....	1 05	.....	9 00	31.00	........Watertown........	.....	6 55	9 00	.....	11 50	.....	4 50	8 55	9 00
9 17	8 17	.....	6 02	.....	1 17	.....	9 12	35.29	.........Hazleton.........	.....	6 43	8 48	.....	11 38	.....	4 38	8 43	8 48
9 30	8 30	.....	6 12	.....	1 30	.....	9 25	41.00	........**Winsted**........	.....	6 30	8 38	.....	11 25	.....	4 25	8 30	8 35
9 49	8 49	.....	6 31	.....	1 49	.....	9 44	48.69	.......Silver Lake.......	.....	6 11	8 19	.....	11 06	.....	4 06	8 11	8 16
10 10	9 10	.....	6 50	.....	2 10	.....	10 05	58.00	......**Hutchinson**......	.....	*5 50	†8 00	.....	*10 45	.....	*3 45	k7 50	§7 55
P M	P M	.....	P M	.....	P M	.....	A M	.....	ARRIVE] [LEAVE	.....	A M	A M	.....	A M	.....	P M	P M	A M

Additional Trains—Leave Minneapolis §5 25 a.m., §2 25, §3 25, *k*7 25, *a*10 25 p.m., arrive Stubbs Bay 6 30 a.m., 3 30, 4 30, 8 30, 11 25 p.m. Leave Stubbs Bay §7 35 a.m., §3 30, §6 30, *a*7 30, §9 30, *a*11 35 p.m., arrive Minneapolis 8 35 a.m., 4 35, 7 35, 8 35, 10 35 p.m., 12 35 night.

*Daily; †daily, except Sunday; §Sunday only; *a* Saturday and Sunday only; *k* Saturday only. STANDARD—*Central time.* **Connections.**—At Minneapolis—With lines diverging.

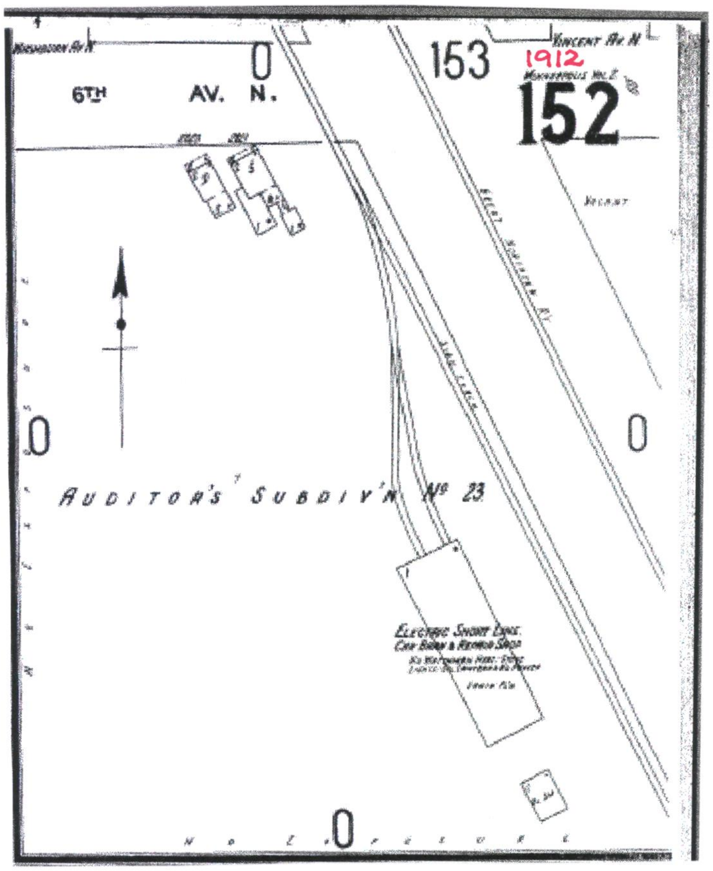


MINNESOTA WESTERN RAILWAY COMPANY

Between Glenwood Jct. and Gluek

WESTWARD Second Class	WESTWARD First Class	Station Number	Distance From Minneapolis	TIME TABLE No. 7 Takes Effect 12:01 A. M. Sunday, January 2nd, 1944	Signs	Car Capacity Sidings	EASTWARD First Class	EASTWARD Second Class
7	5						6	8
Freight Monday Wednesday Friday	Passenger Daily Except Sunday			STATIONS			Passenger Daily Except Sunday	Freight Tuesday Thursday Saturday
	L 5.30 PM	0	3.15	MINNEAPOLIS Y	DN	—	A 9.26 AM	
TRAINS BETWEEN MINNEAPOLIS AND GLENWOOD JCT. WILL BE GOVERNED BY E. S. L. T. TIME TABLE								
L 7.15 AM	f 5.40 PM	3	3.15	3.15 GLENWOOD JCT. WOG	PC	YD	9.14	A 1.45 PM
			4.43	1.28 M. N. & S. CROSSING				
f 7.25	f 5.46	C5	5.50	1.07 WINNETKA		3	f 9.09	f 1.35
f 7.27	f 5.47	C6	5.91	.41 BUSCH	P	6	f 9.08	f 1.34
f 7.49	f 5.56	C10	10.08	4.17 PARKER'S LAKE	P	5	f 9.00	f 1.20
		C12	11.74	1.66 PENCE		2		
f 7.59	f 6.05	C14	13.66	1.92 SUMMIT PARK	P	5	f 8.53	f 1.07
f 8.10	f 6.13	C18	17.72	4.06 STUBBS BAY	P	2	f 8.44	f12.55
f 8.30 6	f 6.26	C24	23.97	6.25 LYNDALE	P	14	f 8.30 7	f12.38
s 9.00	s 6.44	C31	30.18	6.21 WATERTOWN W	D	20	s 8.12	s12.20 PM
s 9.45	s 7.05	C41	40.08	9.90 WINSTED	D	35	s 7.52	s11.35
f 9.56	f 7.16	C45	44.46	4.38 SHERMAN	P	2	f 7.41	f11.04
s10.10	s 7.25	C49	48.61	4.15 SILVER LAKE	D	22	s 7.32	s10.52
f10.20	f 7.33	C53	52.63	4.02 KOMENSKY	P	2	f 7.24	f10.38
s11.35	s 7.45	C58	57.40	4.77 HUTCHINSON WYC	D	40	s 7.15	s10.25
f11.58	s 8.03	C67	66.11	8.71 CEDAR MILLS	P	23	f 6.56	f 8.54
f12.09 PM	s 8.11	C71	70.26	4.15 CORVUSO	P	8	s 6.47	f 8.43
s12.32	s 8.21	C76	75.07	4.81 COSMOS	D	25	s 6.37	s 8.30
f12.43	f 8.29	C80	79.15	4.08 THORP	P	8	f 6.27	f 8.08
s 1.10	s 8.40	C85	84.10	4.95 LAKE LILLIAN WY	D	25	s 6.18	s 7.55
s 1.35	s 8.54	C92	91.14	7.04 BLOMKEST	D	20	s 6.05	s 7.27
f 1.45	s 9.03	C96	95.20	4.06 ROSELAND	P	30	s 5.56	f 7.12
s 2.00	s 9.13	C100	99.40	4.20 PRINSBURG	D	20	s 5.46	s 7.00
			108.30	8.90 G. N. CROSSING				
s 2.35	s 9.36	C110	108.88	.58 CLARA CITY W	D	21	s 5.24	s 6.25
A 3.00 PM	A 9.50 PM	C115	114.65	5.77 GLUEK TC	D	YD	L 5.10 AM	L 6.00 AM
7	5						6	8

4


Washington Av. N
0
6TH AV. N.
153
1912
Vincent Av. N
Minneapolis Vol. 2
152
Vacant
Great Northern Ry.
0
0
Auditor's Subdiv'n No 23
Electric Short Line.
Car Barn & Repair Shop
0
No Exposure

JANUARY 22, 1916] ELECTRIC RAILWAY JOURNAL

~~**Brownsville (Tex.) Street Railway.**—Operation has been resumed by this company on its 3-mile line in Brownsville upon which service was suspended last spring.~~

~~**Ogden, Logan & Idaho Railway, Ogden, Utah.**—During 1916 this company plans to spend about $1,000,000 for extensions and improvements to its system. Right-of-way has been purchased for a line from Hot Springs to Brigham City and it is expected that construction will begin soon.~~

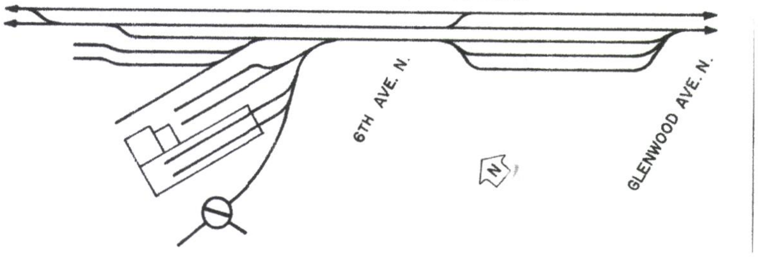
~~**Salt Lake & Ogden Railway, Salt Lake City, Utah.**—This company plans to double-track its line between Centerville and Wilcox, about 3 miles.~~

~~**Norfolk & Western Railway, Norfolk, Va.**—It is reported that this company is considering the electrification of its entire Pocahontas division.~~

SHOPS AND BUILDINGS

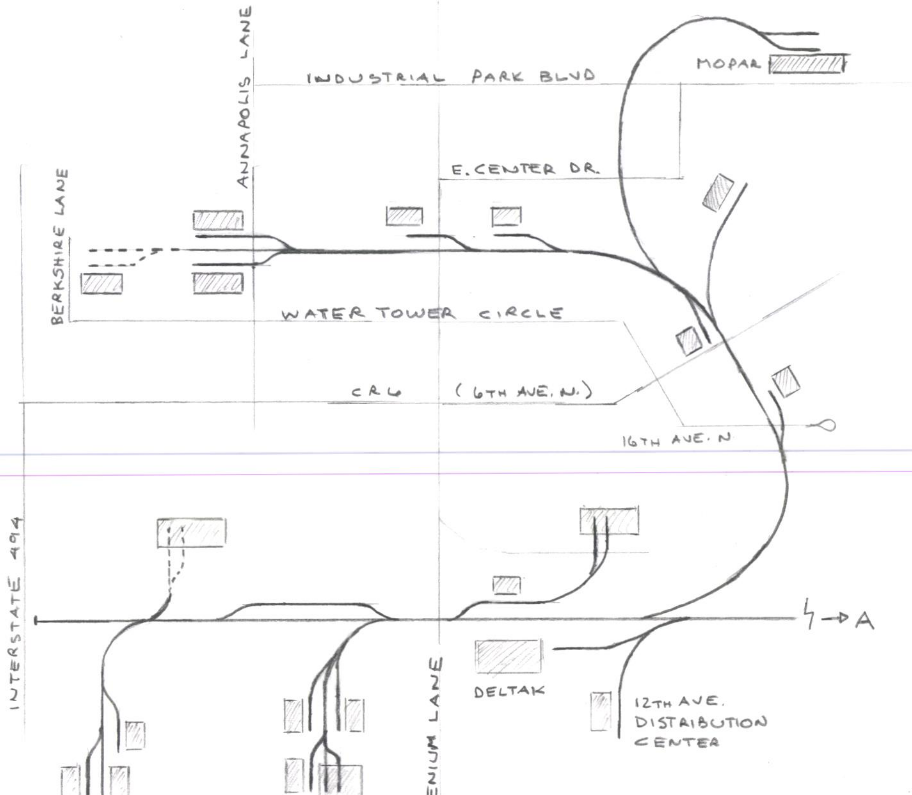
Electric Short Line, Minneapolis, Minn.—A fire of unknown origin completely detroyed the repair shops, blacksmith shop, oil house, coal dock and chute of the Electric Short Line Railway on Jan. 15. A store room containing a large amount of stock was also a complete loss, as well as one gas-electric motor car, 12,000 gal. of motor spirits and a considerable amount of lubricating oil. The loss is estimated at approximately $100,000.

ELECTRIC SHORT LINE RY. CARHOUSE LOCATED ON
ELECTRIC SHORT LINE TERMINAL CO. TRACKAGE 1920
(ADJACENT TO GREAT NORTHERN RY. LINE)


6TH AVE. N.
N
GLENWOOD AVE. N.

MINNEAPOLIS INDUSTRIAL RAILWAY

OCT. 1994


INDUSTRIAL PARK BLVD
ANNAPOLIS LANE
MOPAR
E. CENTER DR.
BERKSHIRE LANE
WATER TOWER CIRCLE
CR 6 (6TH AVE. N.)
16TH AVE. N
INTERSTATE 494
XENIUM LANE
DELTAK
12TH AVE. DISTRIBUTION CENTER
A

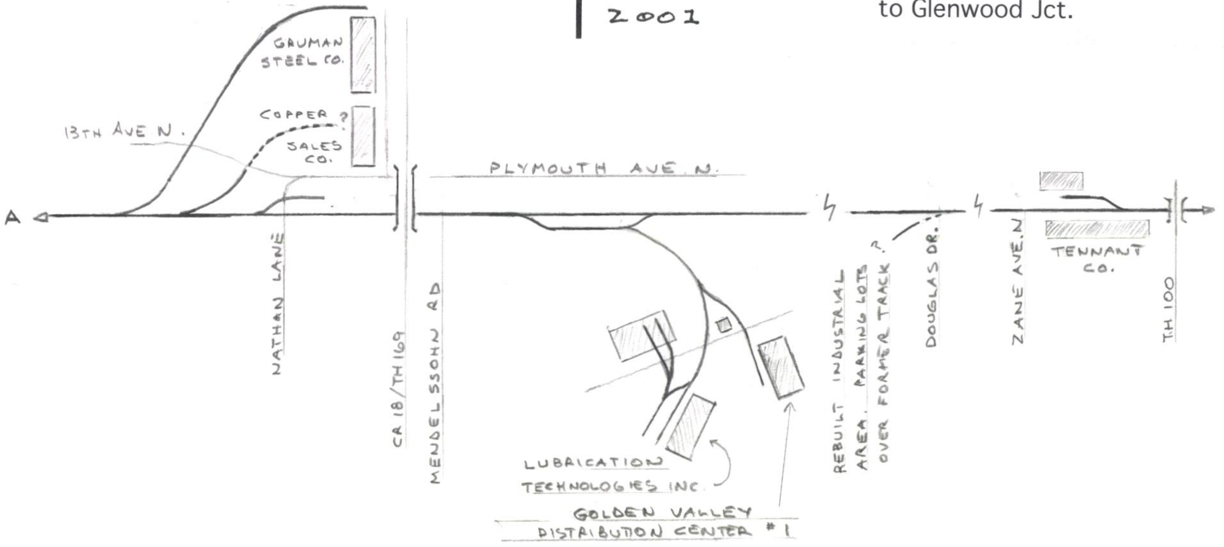
West ↓	GOLDEN VALLEY INDUSTRIAL LEAD*		East ↑
Siding Length	STATION	Mile Post	Method of Operation
	EAST MINNEAPOLIS		YARD LIMITS
	MINNEAPOLIS JCT.	*9.5*	
	LYNDALE JCT.	*12.4*	
	(JCT. WAYZATA SUB)		TWC
	MW JCT.	*1.7*	
	(JCT. CP MN&S SPUR)		YARD LIMITS
	GLENWOOD JCT.	3.0	
	(JCT. UP)		
	GOLDEN VALLEY	5.6	
	PLYMOUTH	9.5	

Radio Frequency: 160.890 (AAR 52)

Maximum speeds:
East Mpls. to Mpls. Jct.: 20 mph
Mpls. Jct. to MW Jct.: 25 mph
MW Jct. to Plymouth: 10 mph

Trackage rights:
UP operates over BNSF from East Minneapolis to MW Jct.
UP operates over CPR MW Jct. to Glenwood Jct.

2001


GRUMAN STEEL CO.
COPPER SALES CO. ?
13TH AVE N.
A
NATHAN LANE
CA 18/TH 169
MENDELSSOHN RD
PLYMOUTH AVE N.
REBUILT INDUSTRIAL AREA. PARKING LOTS OVER FORMER TRACK ?
DOUGLAS DR.
ZANE AVE. N
TENNANT CO.
T.H. 100
LUBRICATION TECHNOLOGIES INC.
GOLDEN VALLEY DISTRIBUTION CENTER #1

ELECTRIC SHORT LINE / MINNESOTA WESTERN RAILROAD EQUIPMENT

ELECTRIC SHORT LINE RAILWAY EQUIPMENT	6/30/1914	6/30/1915	6/30/1916	12/31/1917	6/30/1920
Passenger Motor Cars	4	6	6	3	3
Passenger Trailers	18	17	14	14	14
Passenger-Baggage Trailers			1	1	1
Baggage & Express Trailers				1	3
Parlor Car			1	1	
Sleeping Cars			3	2	3
Steam Locomotives	0	2	4	3	4
Box Cars	8	89	135	135	119
Flat Cars	7		15	15	16
Gondola Cars	4		26	25	23
Stock Cars			12	14	17
Tank Cars			1	1	
Refrigerator Cars			4	4	4
Caboose Cars	1	0	1	1	1
Ballast Cars			20	20	18
Steam Shovels			1	1	1
Ballast Spreaders					1
Center Ballast Plows					1

Dec.31st	Steam Locomotives	Passenger Cars	Freight Cars	Company Cars
1920	3	21	185	21
1921	3	23	183	21
1922	4	24	165	22
1923	4	21	159	24
1924	4	21	141	21
1925	4	21	138	21
1930	3	22	119	10
1931	3	22	119	10
1932	1	9	36	6
1933	1	8	33	6
1934	0	7	33	6
1935	0	6	12	5
1936	0	4	10	3
1937	0	3	3	5

Northern Pacific Ry. Historical Society
Publication on Business Cars

No. 1999

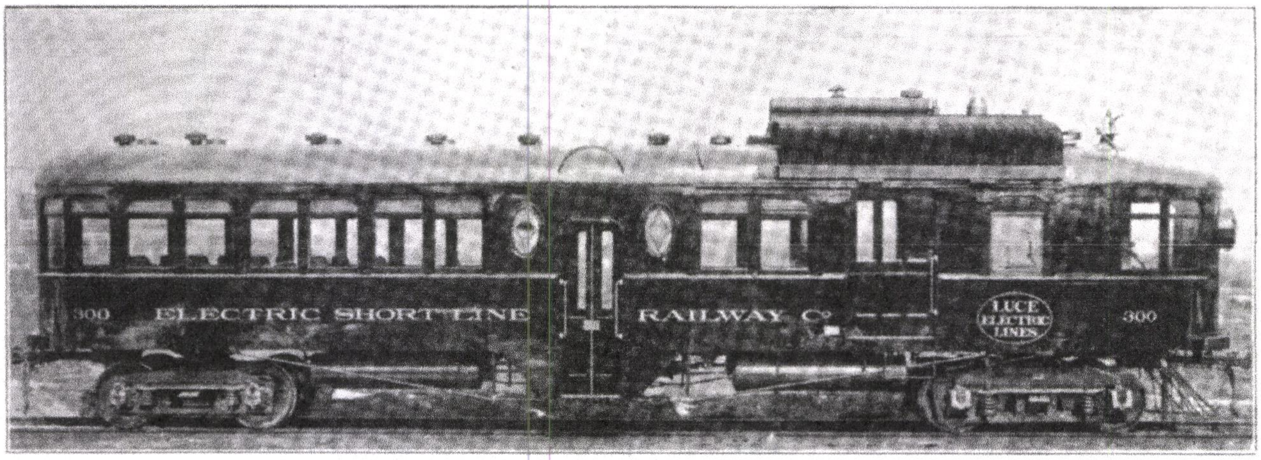
This car was acquired by the N.P. Ry. with the 1901 purchase of the Seattle & San Francisco Railway & Navigation Co., a small railroad that operated along Seattle's waterfront. When the car came to the N.P. Ry. it was lettered as S&SFR&N coach #1, but undoubtedly it had been the property of some other railroad at an earlier stage in its career.

This is probably the same car that helped to justify the "Navigation" part of the S&SFR&N's corporate name. It seems that one day the crew of the railroad's lone engine succeeded in shoving the car through an open drawbridge and into the channel below, much to the surprise and discomfort of the car's sole passenger.

The N.P. Ry. renumbered the car to coach 682 at South Tacoma in December, 1902. However only one month later, according to N.P. Ry. records, the car was remodeled and changed to Superintendent's Car #1999. Number 1999 was used on the Seattle Division as the Division Superintendent's car. It was rebuilt during 1920 and the interior arrangement reconfigured. The car's interior was finished in ash and poplar.

By October, 1927, #1999 was judged to be in such poor condition that it no longer could be handled in mainline trains. About this time the Minnesota Western Railroad was looking for a business car and asked the N.P. Ry. if it had any available for sale. The N.P. Ry. offered to sell #1999 to the M.W. R.R. The sale was completed October 25, 1927. The further adventures of the car are uncertain.

March, 1916 **ELECTRIC TRACTION** **257**



EQUIPMENT

GAS-ELECTRIC PASSENGER CARS

No.	G.E. Serial No.	Date Built	Type	Engine	Motors	Cap	Wt	Ref.
300	3703	5-09	CE50B5½	GM-16C1	2 205	45	38	2
?	3776	7-14	RE70B11	GM-16C3	2 205		52	3
302	3777	2-06 6-14	RE65B13½	GM-16C1	2 69B	40	61	4
304	Drake	1912			2WH305	44	32½	1
306	3778	8-14	RE70B11	GM-16C3	2 205		52	
308	3779	3-15	RE70B11	GM-16C3	2 205		52	
310	3745	4-13	RE70B11	GM-16C1	2 205		50	5
312	3792	8-16	RE70B11	GM-16C10	2 205D	62	51½	6
314	3747	2-13	RE70B11	GM-16C1	2 205D	91	49	8
316	3743	5-13	RE70B11	GM-16C1	2 205D	91	49	8
318	3746	4-13	RE70B11	GM-16C1	2 205D	91	49	8

GAS-MECHANICAL PASSENGER CAR

1	127	1912	McKeen Motor Car Co.	7

MINNESOTA WESTERN R.R./RY.

30 ex ESL Ry. 306
32 ex ESL Ry. 308
34 ex ESL Ry. 314
36 ex ESL Ry. 316
38 ex ESL Ry. 318
The above five cars were all in service as of 4-1-1931.
39 See Reference 9.

STEAM LOCOMOTIVES

5	0-6-0	Schenectady 1891 Weight 42 tons.
6	2-6-0	Baldwin 1888 Weight 66 tons. Ex Northern Pacific Ry. 536?
201	2-6-0	H.K. Porter 1914 18"x24" cylinders, 51" drivers, weight 76 tons or 193,600 lbs., tractive effort 23,790 lbs., steam pressure 175 p.s.i. Ex MStPR&DET Co. 201 acquired 1916. Retired 1934.
303	4-4-0	Baldwin 1886 or 1887 Ex MStP&SSM Ry. 303 acquired 1920. Retired 19??
143, 146	2-6-0	American Locomotive Co., Schenectady Works 1907. 21"&26"x32½" cylinders, 55" drivers, weight 193,600 lbs., tractive effort 26,600 lbs., steam pressure 200 p.s.i. Ex MStP&SSM Ry. 143,146 acquired 1923. Retired 1932. These were cross-compounds: one small 21" cylinder and piston valve on left side; one large 32½" cylinder with slide valve on right side.

Passenger Motor Cars
Roster Notes

1. The Missouri Oklahoma & Gulf Ry. ordered six Drake Railway Automotrice Co. (Chicago) cars from the St. Louis Car Co. on order number 932 dated May 7, 1912. The cars were numbered 100-105 and entered service in November, 1912. They were passenger-baggage cars of wood construction, 56 ft. long and 9' 6" wide. St.Louis Car Co. built the bodies and furnished St. Louis 23A front trucks with two Westinghouse 305 (60 h.p.) motors, and St. Louis 23B rear trailer trucks. A six-cylinder 90 h.p. gasoline engine, started by cranking, was direct-connected to a 55 KW generator. The water cooling system was installed on the roof, the water being circulated by a geared positive pump. Car heating was obtained from the engine coolant together with a Peter Smith heater located in the baggage compartment. The baggage compartment and combined engine-control room was located at the front end of the car. A control cab, for double end operation, was located at the rear end. The passenger compartment seated 44 persons. Total weight of the car was 65,000 lbs. Top speed was 35 to 40 m.p.h. At a schedule speed of 25 m.p.h. fuel consumption was 2.5 to 3.5 miles per gallon. The cars could be used to pull freight trailers at much slower speeds. One car, the interior damaged by fire, was returned to St. Louis Car Co. for repair under order number 1004 in May, 1913, which listed the car number as 304. The MO&G Ry. entered receivership at this time and apparently could not pay for the repairs. In May, 1913, the repaired car was sold to the ESL Ry., which retained the number 304. This car made the first official trip over the ESL Ry.

2. This car was originally General Electric Co. demonstrator #3 built May, 1909, as Type CE50B8 with a GM-10B1 engine. The car demonstrated on the Dan Patch Electric Line during April-May, 1911. It was sold about November, 1911, to the Gary Hobart & Eastern Traction Co. as their #1, being rebuilt during January, 1912, as Type CE50B6 with serial number 3703, and delivered in February, 1912. The car did not enter service until September, 1912. It was returned to G.E. Co. in November, 1912, and resold to G.E. in May, 1913. G.E. Co. again rebuilt the car as Type CE50B5½ with a GM-16C1 engine and resold it to the ESL Ry. in 1914.

3. General Electric Co. records show this serial number as originally connected with the ESL Ry. However the car was received August 6, 1914, at Thief River Falls, Minn., by the Minnesota Northwestern Electric Ry.

4. This was General Electric Co.'s first gasoline-electric car. A Delaware & Hudson R.R. wood passenger-baggage car originally built by Barney & Smith Car Co. was re-arranged with a motorman's compartment, engine room, baggage room, smoking compartment, and passenger compartment. Seating capacity was 40 persons including twelve in the smoking compartment. The gasoline engine was an

English-built six-cylinder (horizontally opposed) 140 h.p. unit, started by firing a blank cartridge, driving one G.E. 120 KW 600 volt D.C. generator, with a separate 5.5 KW 110 volt compound wound exciter. Two G.E. 69B (75 h.p.) motors were mounted on the front truck. The completed car weighed 68 tons. It was operated during 1906 on the D&H R.R.'s Saratoga-Schenectady branch line as their #1000. The car proved too heavy for the power available. Slow acceleration caused schedule keeping problems, and it could not pull trailers. Removed from service later in 1906, the car was returned to G.E. Co. G.E. rebuilt the car during June, 1914, re-equipping it with a GM-16C1 engine and roof-mounted finned tube radiators; assigned serial number 3777 it was sold to the ESL Ry.

5. This was General Electric Co. stock car #24.

6. Sold 1917 to the Midland Valley Ry. as their M-3. Resold 1929 to the Kansas Oklahoma & Gulf Ry. as their 1st M-21. Scrapped 1939. 2nd M-21 and 2nd M-23 were rebuilt in 1939 from parts of other cars and were not scrapped until 1954, which may account for the confusion in scrapping dates.

7. McKeen Motor Car Co. reportedly built this car in 1912. MStP&SSM Ry. records indicate it was acquired in March, 1914, for use between Thief River Falls and Noyes on trains 204 and 205. The car was 70 ft. long, had a 200 h.p. engine, weighed 77,100 lbs., and seated 84 persons. Reported as unsuitable for that service it was sold to the ESL Ry. One source states 1916, one report lists it in service as of 6-30-1920, and Soo Line records give the date as July, 1920.

The disposition of four cars, 300, 302, 304 and 310, can only be summarized: (ALSO SEE NOTES ON PAGE 4)
one car destroyed in a fire at the shops 1-15-1916; (BUILDING DESTROYED BY FIRE.)
two cars sold in 1916 and/or 1917; and
one car destroyed by fire in 1918.
Jim Buckley states that McKeen car #1 was sold in 1922 to the Chicago Great Western Ry. as their #1003.

8. Three cars were sold by the Chicago Peoria & St. Louis Ry. to the Oklahoma Kansas & Missouri Inter-Urban Ry. of Miami, Okla., during 1915-1916. The latter company was renamed Oklahoma Kansas & Missouri Ry. in May, 1917, and Northeast Oklahoma Traction Co. in November, 1919. Electrification of this railway was completed in January, 1921. It later became the Northeast Oklahoma R.R.

G.E. No.	Date Built	CP&StL Number	OK&M No.	Date Purch.	Sold to Date	ESL Ry. Number	MWRR No.
3747	2-13	101*	108	3-16	4-22	314	34
3746	4-13	102*	107	3-16	4-22	318	38
3743	5-13	103	106	12-15	4-22	316	36

* Rebuilt by CP&StL Ry. Jacksonville, Ill., shops in 1914 with railway post office compartments.

36 ALSO HAD AN RPO COMPARTMENT.

9. The Pullman Company built two gasoline-electric motor cars on order number 4926 during 1925 for the Detroit Toledo & Ironton Railroad as their numbers 35 and 36. Each was equipped with two Hall-Scott 150 h.p. engines mounted under the car floor. The cars were 72'6" long, weighed 66 tons, and seated 46 or 48 persons. Both cars were of the railway post office-baggage-passenger configuration. Number 36 was sold to the Minnesota Western Railway and renumbered 39. It was received November 3, 1939, and entered service June 6, 1940. The car was destroyed by fire December 23, 1946, one mile east of Stubb's Bay.

Wason Manufacturing Co. Order Numbers

300	7317	306 and 308	15165	310,314,316,318	12225
312	17965				

Note 7

Another source says building date was March 1913. It was number 1 on the Soo Line. The Chicago Great Western Ry. rebuilt it in September 1928 to gasoline-electric using an EMC Winton 275 h.p. engine. Passenger service ceased July 26, 1950. The car was scrapped in August 1950. BUILDER'S NO. 127

More Information on Disposition of 300,302,304,310

One car was in a collision with a steam-powered gravel train; newspaper article December 15, 1915. Spilled gasoline caught fire and destroyed the car.

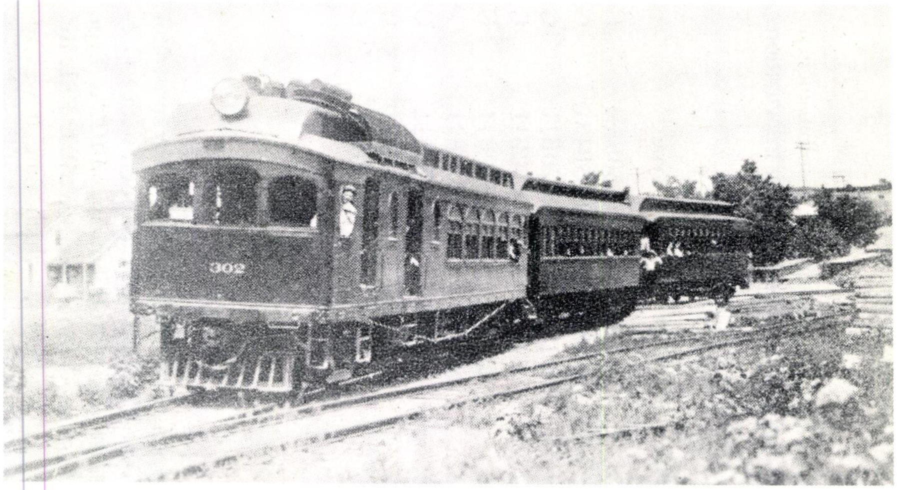
One car was destroyed in the Hutchinson carhouse fire, April 18,1920.

Dispositions of 30,32,34,36,38

30 and 32 retired in 1936.
34 unknown. RETIRED 1937?
36 retired in 1942. (Stanley Mailer claims the car was converted to a passenger trailer in 1942 by removing the engine and generator and re-arranging the space as a parlor-observation.)
38 was the last car used in passenger service. Retired after the end of passenger service September 10, 1947. Retained until 1949 by order of the Minnesota Railroad & Warehouse Commission in the event that spring thaws and road conditions would hamper bus service. Used to switch freight cars on Minneapolis warehouse district trackage during its final days.

36

MN&S RY. AFE'S:
- 21-42 (1942) CONSTRUCT BUNK CAR "PHEASANT" FROM MW RY MOTOR 36.
- 15-47 (1947) RETIRE BUNKS AND MATTRESSES FROM "PHEASANT"



Above: Passenger motor car 302 pulling two passenger trailers. ESL Ry. had "resorts" at Medicine Lake (140 acres of picnic grounds), Parker's Lake (30 acres of wooded grove, sandy beach with bath house, large pavilion with dance floor, rowboats, fishing tackle and bait), and Stubb's Bay (20 acres of picnic grounds, dancing, boating and bathing). (Byron D. Olsen collection)

PV119ED AVERY™

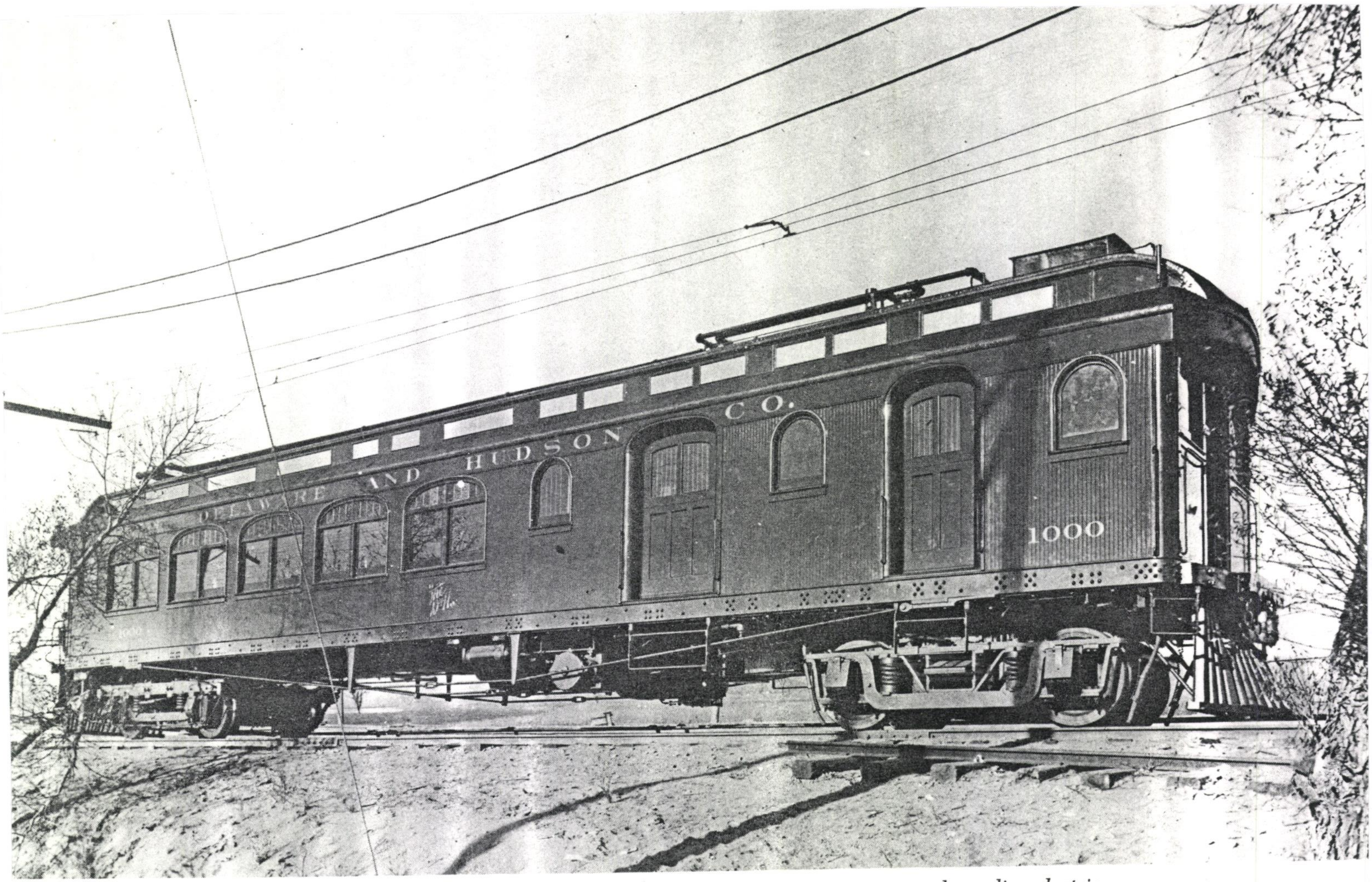
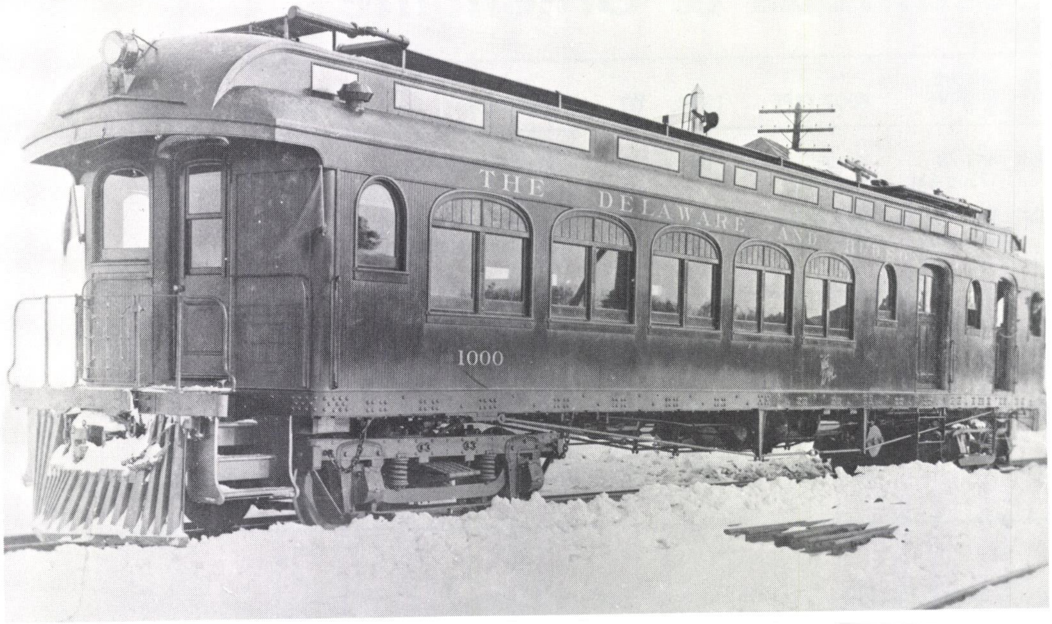

DELAWARE AND HUDSON CO.
1000

Figure 8.24 In 1905–1906 General Electric built its first experimental gasoline-electric car, which was fitted with an English engine. (Jim Shaughnessy Collection)

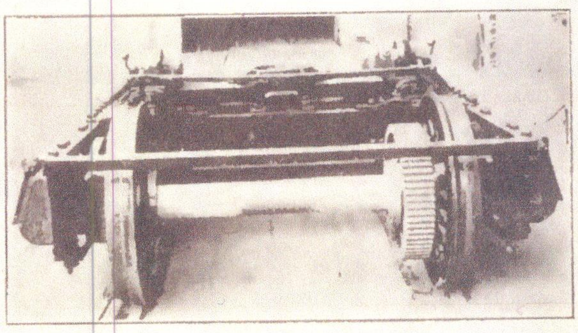

THE DELAWARE AND HUDSON
1000

New Type of Trucks for Gasoline-Electric Motor Car.

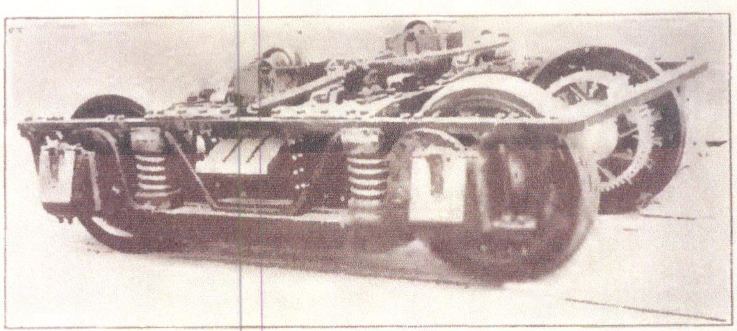
SRR 6-15-05

The American Locomotive Co. has recently completed for the Delaware & Hudson Co., the trucks shown in the accompanying illustrations. This type of truck is designed to carry the body and equipment of a gasoline-electric motor car. The truck weighs 15,000 lb. and is made to carry a load of 50,000 lb. at the centering pin. There will be two G. E.-69 motors mounted in the truck. The specifications for the construction of this type of truck call for a frame of wrought iron 2 x 3½ in. in section, forged in one piece and dropped down 4 in. at one end to clear the draw gear. The boxes are cast iron, similar to M. C. B. standard boxes and are fitted with malleable iron lids and dust guards of wood. Lead lined plastic bronze bearings made by the Ajax Metal Co. are used. These are designed to fit interchangeably with M. C. B., 5½ x 10-in. wedges. Taylor steel-tired plate wheels, 36 in. in diameter, are used, mounted upon axles of open hearth steel. The gears are mounted on the hubs of two of the wheels. The diameter of the axles at the points where they carry the motors is 6½ in. and the motor bearings are 12 in. long. A forged pedestal is used, made of 5 x 1½-in. bar iron and secured to the frame by 1-in. taper turned bolts.

The equalizers built of 6-in. iron and placed on top of the boxes are designed with thimbles between them and bolts through the equalizers to prevent spreading. There are four double coiled springs between the frames and the equalizers. These springs were made by the National Steel Spring Co., and the two triple elliptic springs were made by the American Locomotive Co. The bolster is of the "built up" type with roller bearings on the top of the bolster spaced 58 in. between centers. The swing links are of cast steel with pins of cold rolled steel 2¼ in. in diameter, fastened to the castings by tapered pins. Bolted to the swing link transoms and riveted to the truck frame transom supports are the cross-channels, 12 x 1⅛ x ½ in., with chafing plates to protect the channels from motor wear and with safety straps to prevent the motors from raising. The brakes are inside hung with vertical brake levers and T head hangers. These hangers have bearings and caps at their upper ends to prevent the brakes from chattering. The brake heads are of malleable iron of the M. C. B. Christie type, and the brake shoes are of cast iron, flanged to interchange with the Lappin shoes now used by the Delaware & Hudson Co.



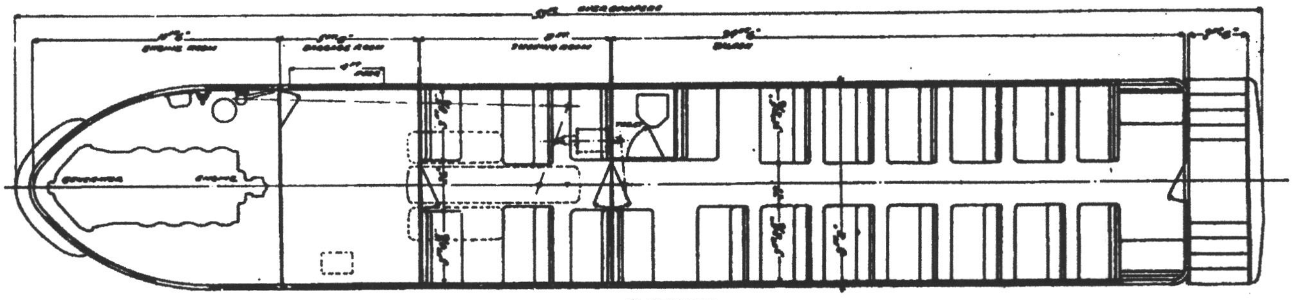
END VIEW OF TRUCK.



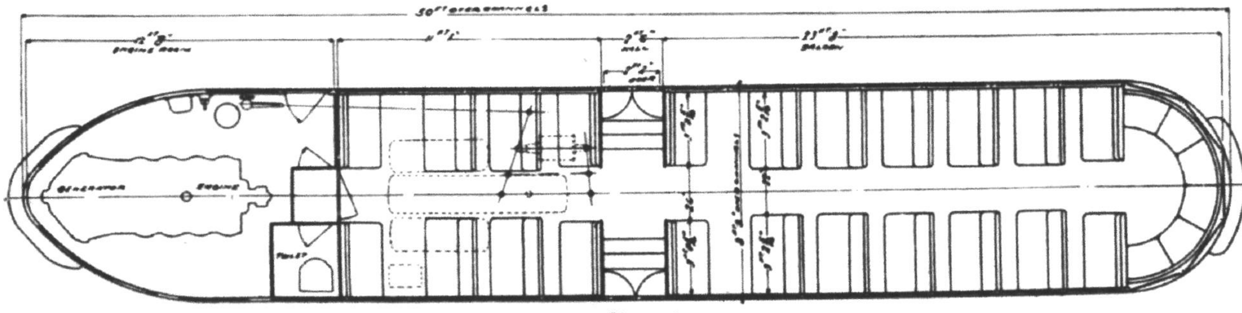
AMERICAN LOCOMOTIVE CO. TRUCK FOR D. & H. CO.

A NEW TYPE OF GASOLINE-ELECTRIC CAR

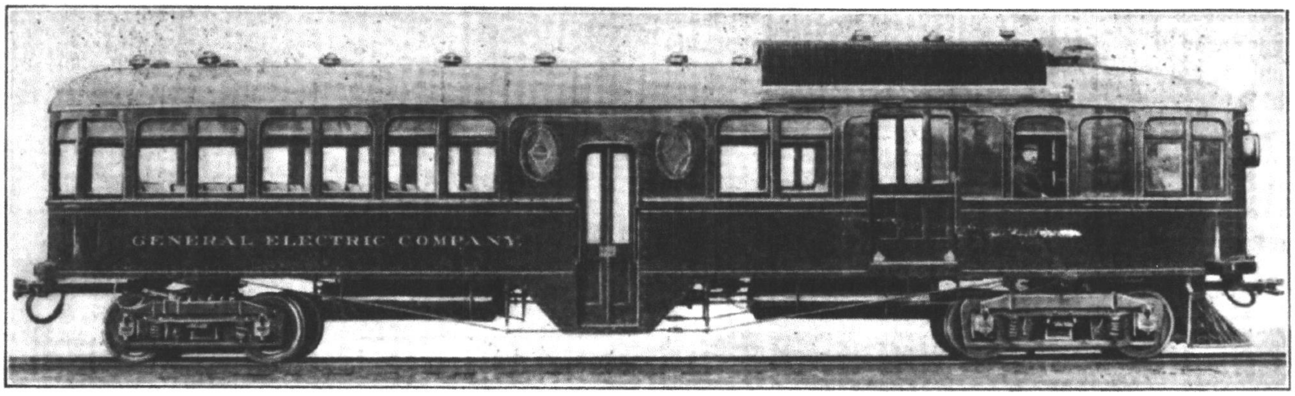
An account of the first gasoline-electric car built by the General Electric Company for the Delaware & Hudson Railroad was published in the Street Railway Journal for Feb. 10, 1906, and a description of the second and lighter car was published in the Street Railway Journal for June 29, 1907. Since the latter time the General Electric Company has given considerable attention to the subject of gasoline-electric cars and has designed a number. They are mounted on double trucks and the forward truck is equipped with two standard railway motors of 100 hp each. The power plant consists of a gasoline engine and an electric generator of 125 hp and a controller similar to a standard railway controller. The speed of the cars is from 50 m.p.h. to 60 m.p.h. and the car can be started, stopped and reversed without stopping or changing the direction of rotation of the gasoline engine. The company believes that the flexibility and easy operation afforded by the electric drive more than counterbalance any advantage secured by a mechanical connection between the engine and the axles.



Floor Plan of Gasoline-Electric Motor Car with Baggage Compartment



Floor Plan of Side Entrance Gasoline-Electric Motor Car



Exterior View of Gasoline-Electric Motor Car

The accompanying photographic engravings illustrate a car which has recently been built by the company with a seating capacity of 50 passengers and an 8-ft. baggage space. The line engravings show plans of cars of similar type designed by the company, but with slight modifications of seating arrangements.

The car illustrated in the photographs is mounted on two trucks. The forward motor truck has a wheel base of 6 ft. 6 in., is equipped with 33-in. wheels and weighs 9500 lb. The rear truck is substantially the same as the motor truck, but with 5-ft. 6-in. wheel base and of somewhat lighter construction. It weighs 6750 lb. The motor truck is equipped with two GE-205, 600-volt commutating pole railway motors mounted directly upon the axles with nose suspension and equipped with standard gear cases.

The power plant consists of an eight-cylinder, 100/125 hp, 550 r.p.m., four-cycle gasoline engine of the "V" type, direct connected to an eight-pole, 80-kw, 600-volt commutating pole generator and direct-coupled, 3½-kw, 32-volt exciter.

The engine cylinders are 8 in. diameter by 8 in. stroke and are constructed of soft, close-grained, gray cast iron. Water jackets are cast integral with the cylinders. Exhaust and inlet valves are of nickel steel and are on the same side. Pistons are of the trunk type and connecting rods are drop-forged machinery steel. The crankshaft is

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of high-carbon machinery steel, forged in a slab and machined to size. Lubrication is secured by automatic forced-feed oiler, supplying oil to all wearing surfaces. Engine cooling is provided by means of thermo-siphon circulation in radiators of the fin tube type of 2000 sq. ft. cooling surface and 60 gal. capacity, suitably placed on the roof of the car. The cooling system is arranged so that it may be filled from the exterior of the car. All parts of cooler and engine can be readily drained.

Passenger Compartment of Gasoline-Electric Motor Car

The ignition system consists of high-tension magneto and plugs. The carbureter is of the overflow type with adjustable control for warm air supply. The gasoline is supplied to the carbureter by means of a plunger pump mechanically driven from the engine. An auxiliary hand pump is also provided for starting.

An air pump driven from the main crankshaft of the engine supplies air for the brakes and whistle. This pump cylinder is 4 in. diameter by 4 in. stroke and has a displacement of 16 cu. ft. of free air per minute when running at 550 r.p.m., which is the normal operating speed of the engine.

The gasoline tank is of steel and of 90 gal. capacity. It is located under the car body and is filled from the exterior of the car. Two strainers are supplied between gasoline inlet and engine. Only one pipe leads from this tank to the gasoline pump, leaving the former at the top.

The controller connects the motors progressively in series and in parallel and the voltage applied to them is controlled by varying the strength of the generator field. This is accomplished by the movement of a handle on the controller. The controller is provided with a reversing handle to change polarity of the armature current in relation to the field current of the motors and thus reverse the car. Substantial handles for regulating the engine spark and throttle are conveniently placed on the motor controller.

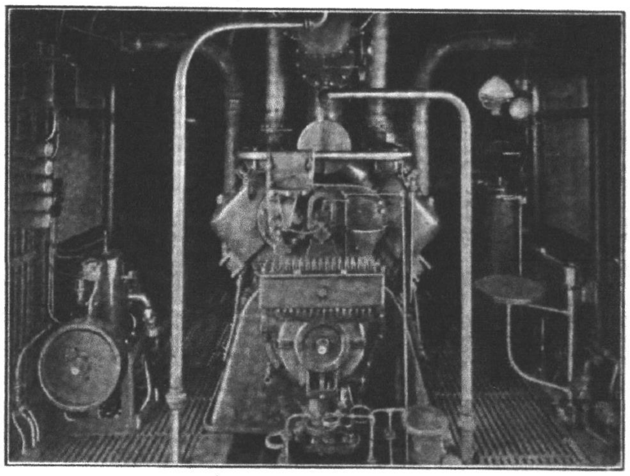
The manufacturers have developed a special controller, which can be arranged for operation from either the self-contained power plant or from the 600-volt overhead trolley circuit of an electric railway system. When operating from the self-contained power plant the speed of the motors is governed as described above. When operating from the overhead trolley the motors are controlled in the usual manner, i.e., series-parallel connections with intermediate steps obtained by placing resistance in the main circuit. The same handle accomplishes both operations. Interlocking devices are provided to prevent operation from one circuit when there is a connection with the other.

Combined straight and automatic air brakes are provided, the straight air being for use when the car is operated alone and the automatic air for use when hauling a trailer furnished with standard automatic brake equipment. The compressed-air supply is provided by the single-cylinder, single-acting pump direct driven from the main crankshaft of the gasoline engine, already described. An auxiliary ratchet hand brake is provided in the engine compartment.

The gasoline engine is started by compressed air from the main reservoir through a distributing valve to the several cylinders in succession. For recharging the reservoirs if necessary when the main engine is shut down a 3¼-in. x 4-in. single-cylinder, single-acting air pump direct connected to a 4-hp, single-cylinder, two-cycle gasoline engine is furnished as part of the equipment and is located on the left side of the engine compartment. This auxiliary air pump equipment is complete and includes all necessary accessories, such as carbureter, ignition outfit, cut-out cocks, valves, etc.

The car is electrically lighted by 25-volt incandescent lamps. Current is supplied from the exciter when the main engine is running and from a 12-cell storage battery located under the car body when the main engine is shut down. Automatic means are provided for switching the lights from one circuit to the other and also for charging the battery from the exciter. A 32-cp incandescent headlight is provided as part of the equipment.

The car body is heated by a system of hot water circulation on the thermo-siphon principle, the heat being obtained from the exhaust gases.



Power Plant of Gasoline-Electric Motor Car

The car is also equipped with an air whistle, gong, suitable signal starting bell, etc.

◆

At the annual meeting of the American Railway Association in New York on May 19, F. A. Delano was re-elected president. The association is composed of officers of the principal steam railroads of the United States, Canada and Mexico, and represents nearly 250,000 miles of road. Its committee on safety appliances reported that out of a total of 2,182,476 freight cars, 97 per cent were equipped with air brakes on Jan. 1, 1909. Of the locomotives in service, 58,425, representing 99 per cent, were equipped with air brakes.

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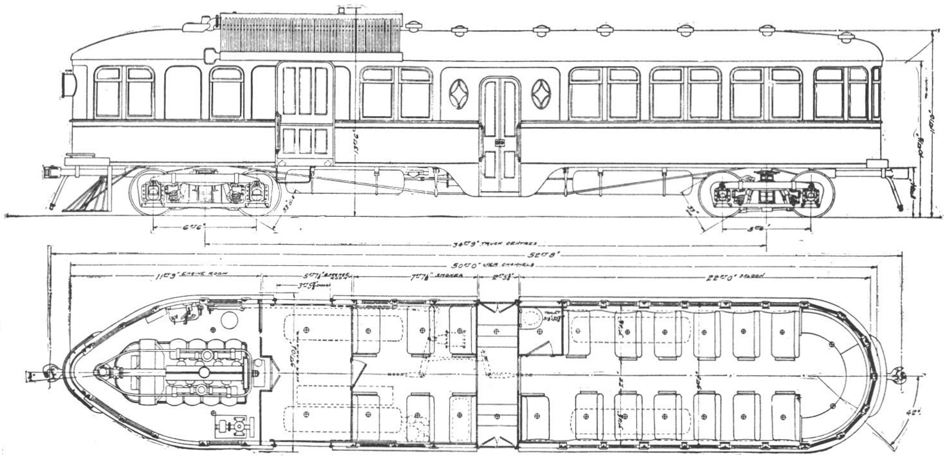
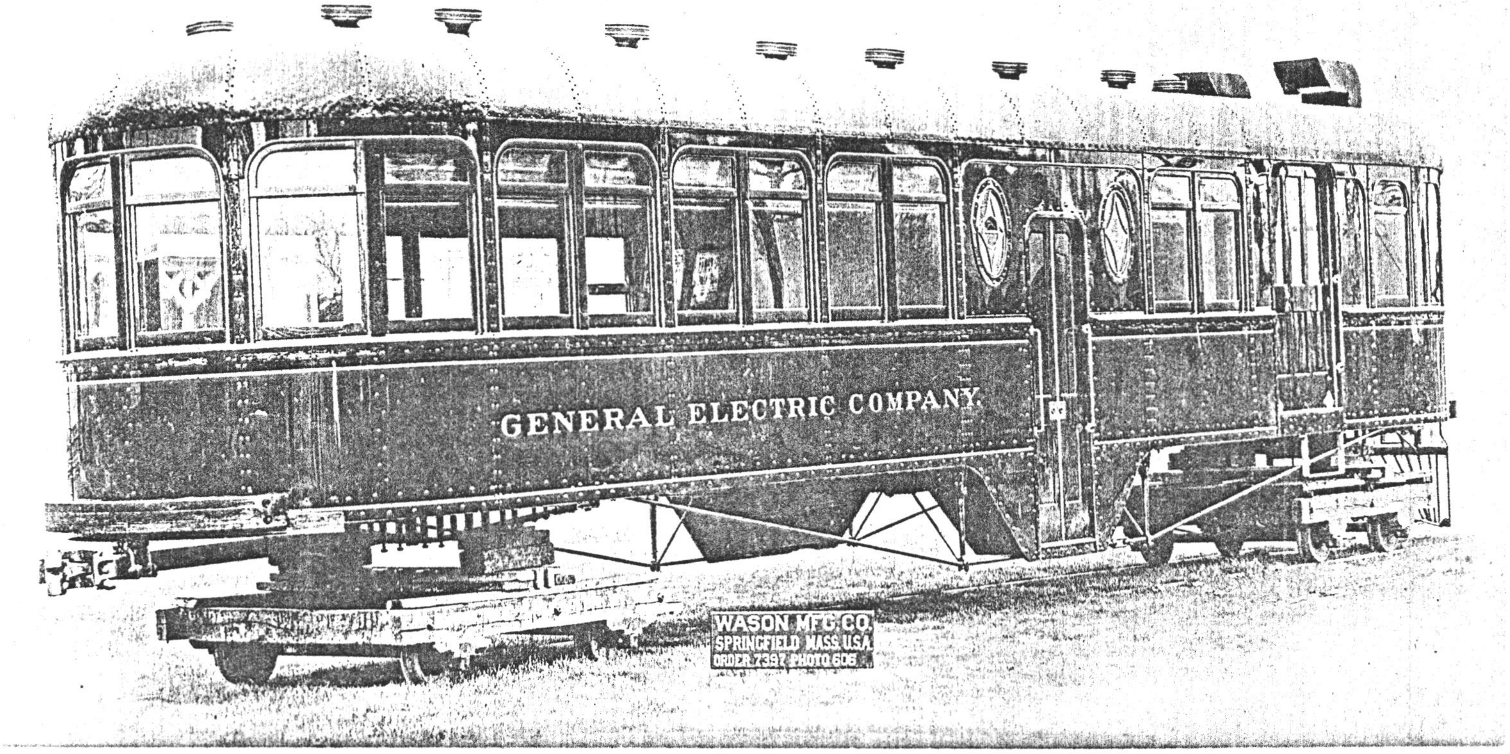
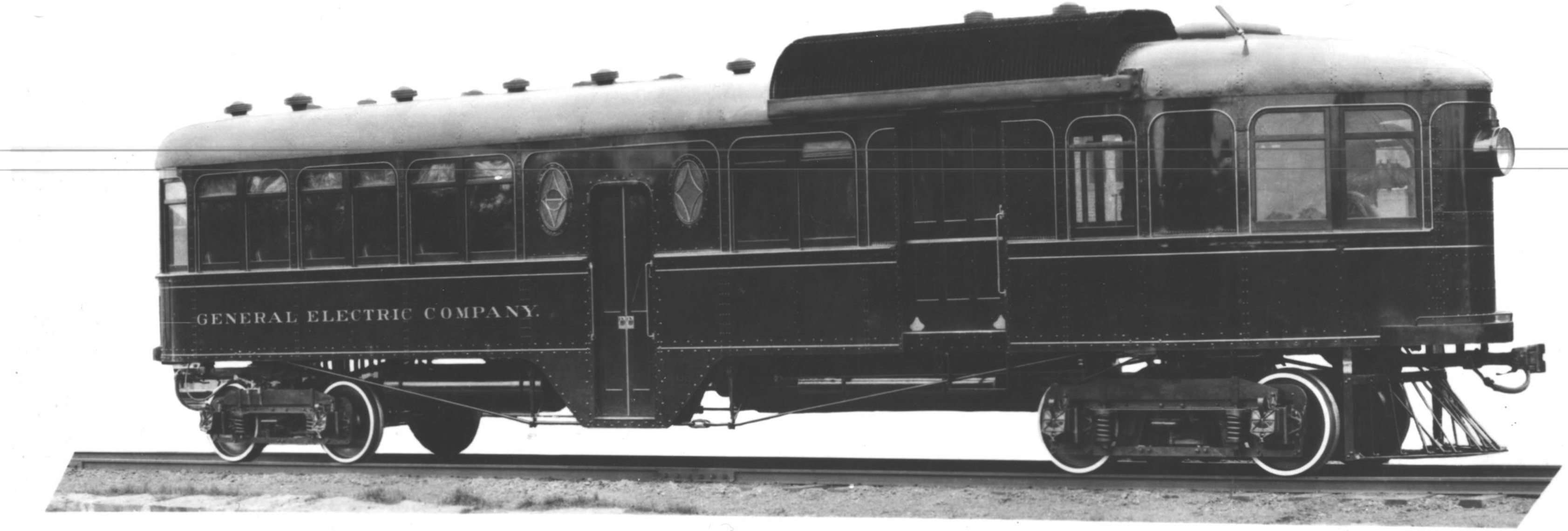

6'6"
8'6"
34'9" TRUCK CENTRES
52'8"
50'0" OVER CHANNELS
11'9" ENGINE ROOM
5'7½" BAGGAGE ROOM
3'5⅝" DOORS
7'7⅞" SMOKER
2'5⅜"
22'0" SALOON
13'6"
11'10"
42°

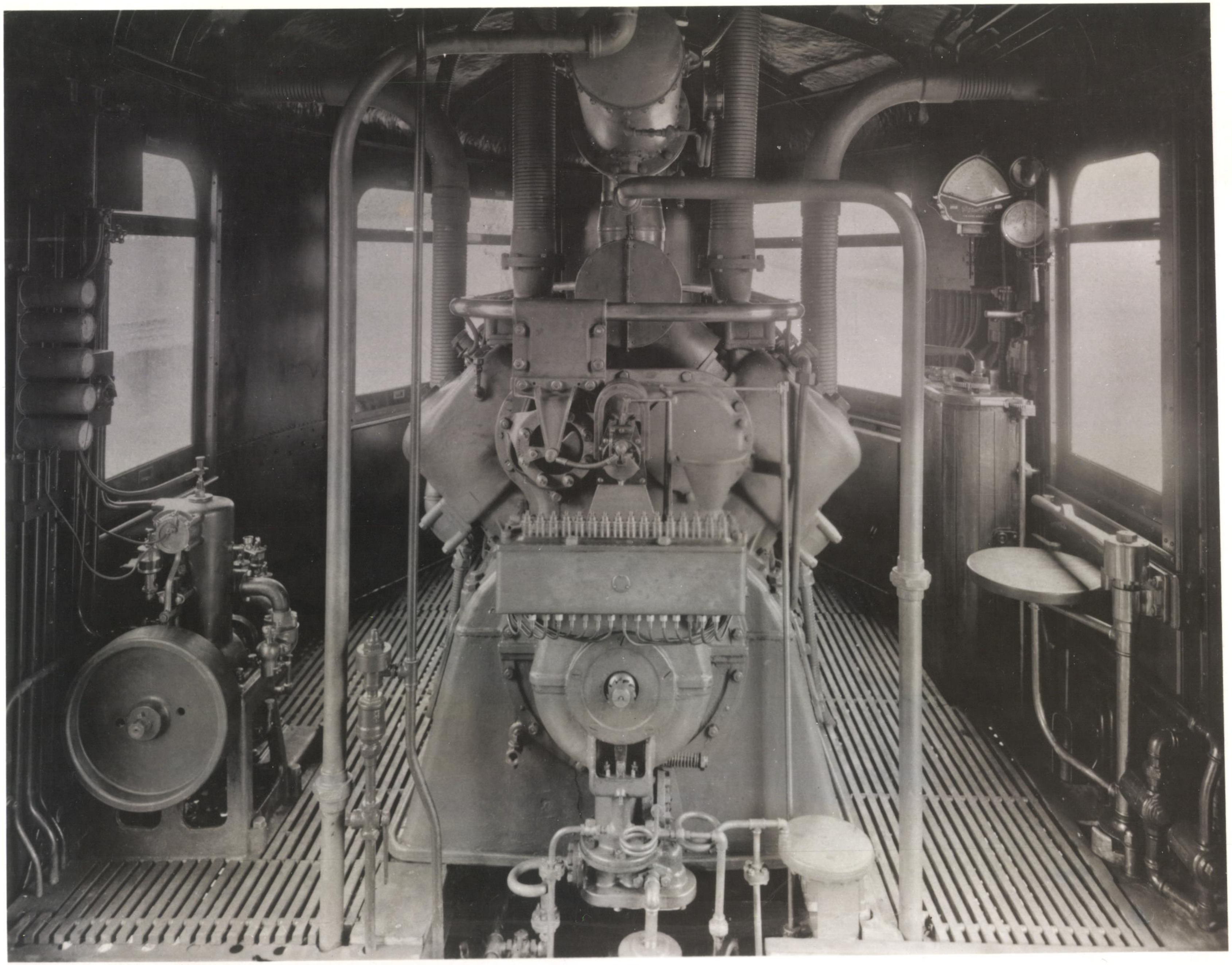

GENERAL ELECTRIC COMPANY.
WASON MFG. CO.
SPRINGFIELD MASS. U.S.A.
ORDER 7397 PHOTO 606

PV119ED AVERY™


GENERAL ELECTRIC COMPANY.

212756 GASOLINE ELECTRIC CAR.

AVERY®
PV119ED



212 776   INTERIOR OF CAB FOR GAS ELECTRIC CAR #3.

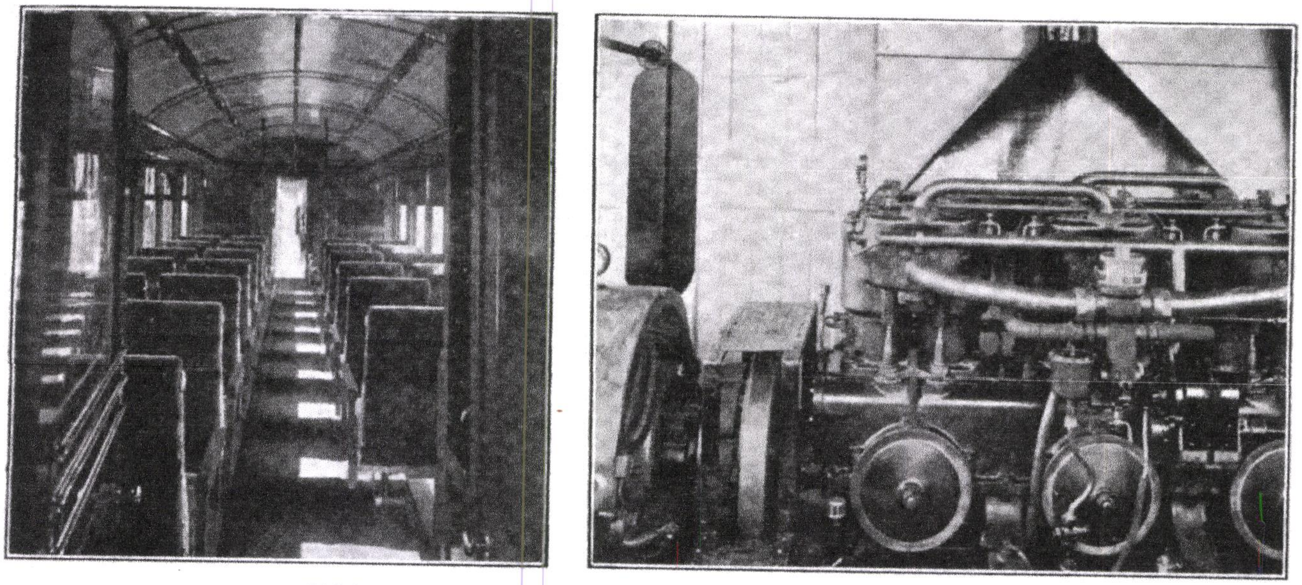
THE DRAKE GASOLINE-ELECTRIC CAR IN OKLAHOMA

A short account was published in the report made by the sub-committee on self-propelled cars of the committee on equipment at the convention of the Engineering Association last October of the extensive experiments conducted by the Arad-Csanad Railway in Hungary with the gasoline-electric car of the French Westinghouse Company. This line, as stated in that report, has engaged extensively in the use of gasoline-electric cars, its service having started with a trial car and grown to a fleet of more than fifty cars in use over a system comprising 290 miles of track. During an experience of seven years these cars have made a mileage of more than 5,300,000, and the traffic has developed rapidly under the influence of frequent car service.

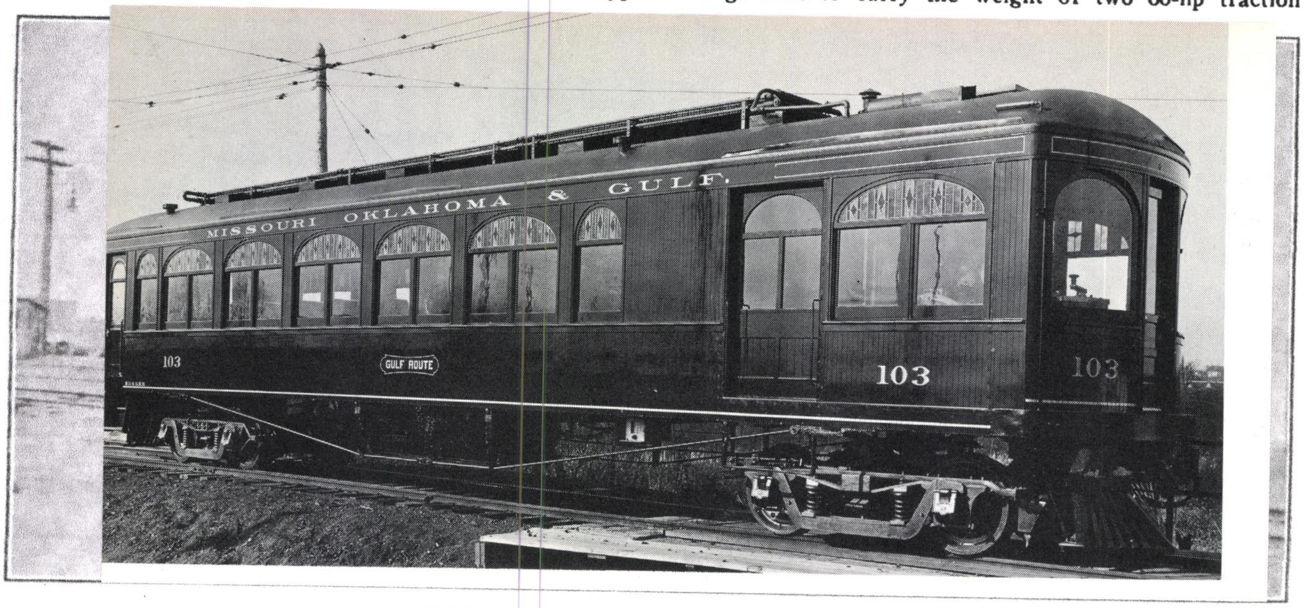
It is of interest to American readers to learn that a type of gasoline-electric car patterned closely after those in use on the Arad-Csanad Railway has recently been adopted by the Missouri, Oklahoma & Gulf Railroad for use between Joplin, Mo., and Denison, Tex. These cars are being supplied by the Drake Railway Automotrice Company, of Chicago and Paris. The portion of Oklahoma traversed by the line is rich and fertile but sparsely settled, and the company expects by means of six motor cars to fill in long gaps between through passenger trains north and south. The first run established is from Muskogee to Henryetta, a distance of 50 miles.

Another run, which also requires two automotrices, is from Durant to Denison, a distance of 30 miles. A more frequent service will be established between Muskogee and Wagoner, where hourly departures will probably be adopted, as the traffic resembles interurban service. The type of car to be used measures over bumpers 56 ft. and has a width over all of 9 ft. 6 in. The car is divided into compartments called engine group, baggage, colored and first class. The car body is constructed with composite steel and wood underframe with wood superstructure. The trucks are M. C. B. standard. The forward or driving truck is strengthened to carry the weight of two 60-hp traction motors, the power equipment and accessories. The total weight of the car complete is 65,000 lb.

The seating capacity is arranged for fourteen colored and thirty first-class passengers. All seats are individual reversible chairs, upholstered in plush. The spacing for seats and aisle has been made liberal to provide for passengers' comfort. Each passenger compartment is provided



Oklahoma Gas-Electric Car—Passenger Compartment and Motor



Oklahoma Gasoline-Electric Car—Side View

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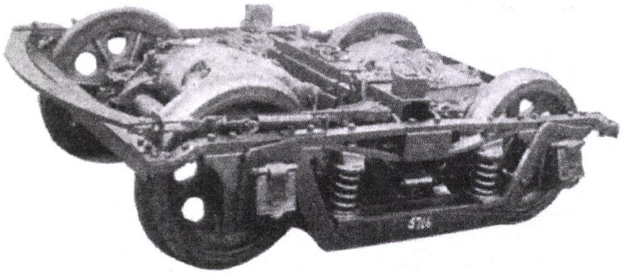
with a toilet room. The interior finish is in mahogany, dull-finished. The arch roof is suitably colored and decorated. The partition separating the classes to comply with State law has a swing door and may be removed at will. Continuous package racks are provided. The lighting of the car will be by means of 30-volt metal lamps fed by storage battery. Headlights are electric-arc type.

The power equipment consists of a gasoline engine direct-connected to an electric generator, suitable electric traction motors on the driving truck and the necessary controllers and accessories. The engine is rated at 90 hp at 950 r.p.m. There are six cylinders, 140 mm x 160 mm, cast in pairs. This engine is connected by flexible coupling to a 55-kw, 500-600-volt interpole generator. A special steel base combines both units, by which means the group is attached to the floor and underframe of the car. The design of the power group permits it to be placed across the car, thus economizing space. The engine room requires but 7 ft. 3 in. of the car's length. Ample room is afforded for the placing of controller, air-brake valves, emergency hand brakes, etc.

The cylinder water-cooling system is placed on the roof of the car, and the circulation is secured by a geared positive pump. The hot cylinder water is used for car heating in cold weather. A Peter Smith heater is placed in the baggage room and connected to both car-heating system and radiator, so that the car may be kept warm and water prevented from freezing when the car is standing in yards or stations and not under power.

The gasoline supply is carried in two 30-gal. steel tanks and is fed by gravity to the engine. As the car consumes only a quart of gasoline per mile of straight level track, the storage capacity is ample for more than a day's run. The motors are Westinghouse No. 305, interpole type, geared for a maximum car speed of 35 m.p.h.

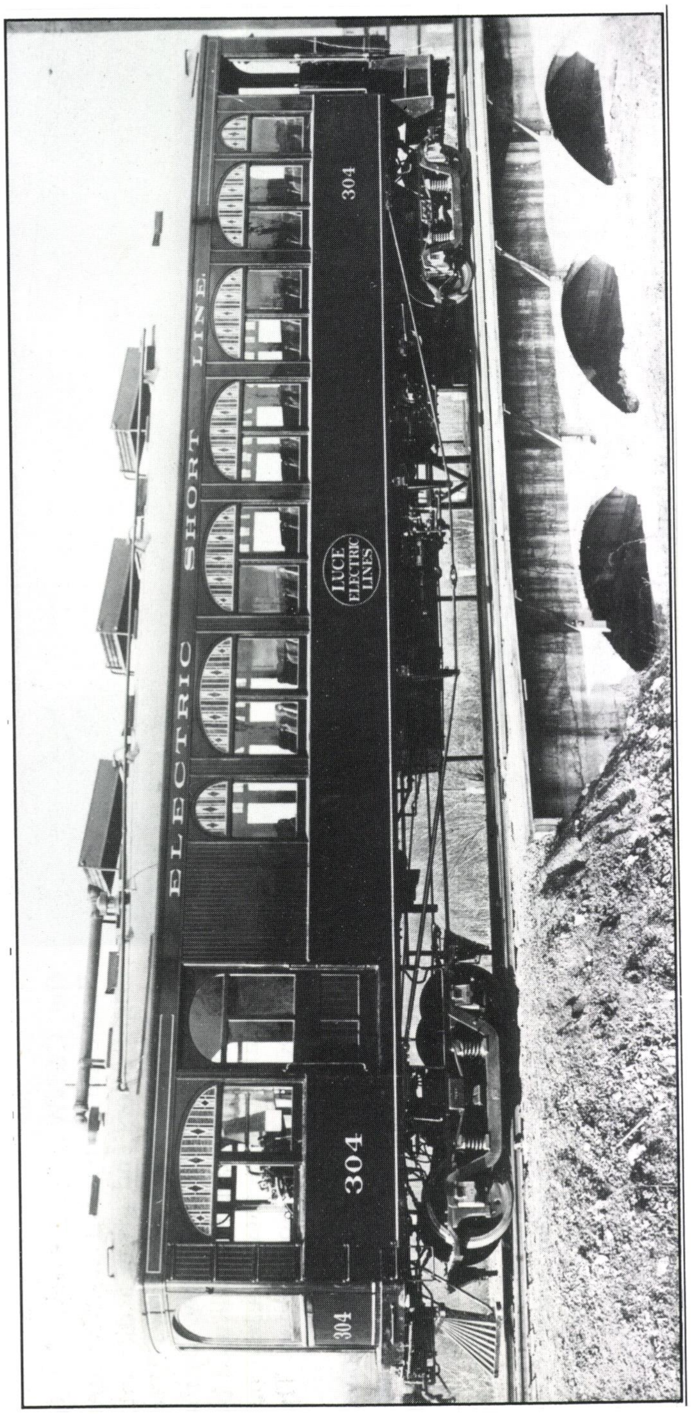


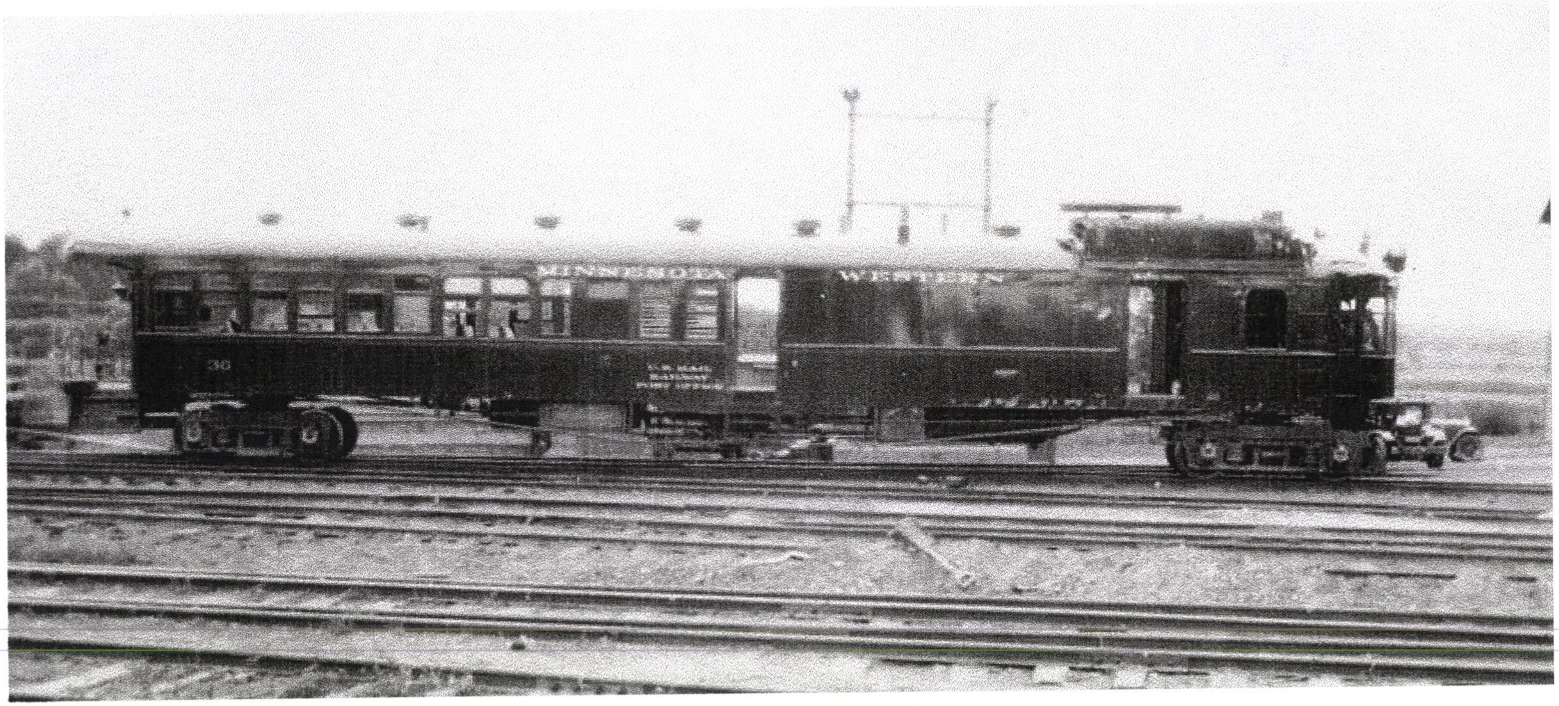
Oklahoma Gas-Electric Car—Truck

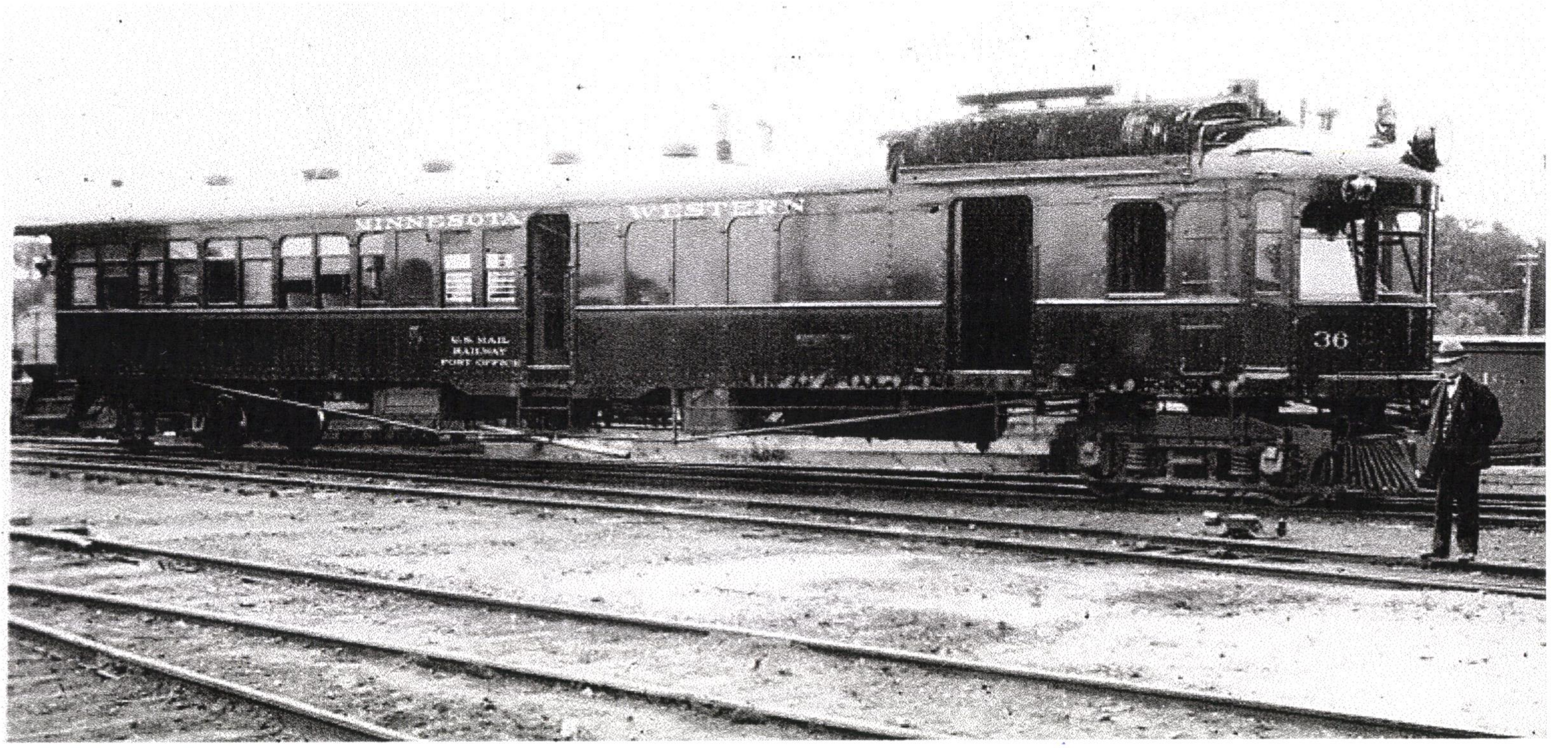
An important consideration to the railroad company was the possibility of operating the automotrice from either end at will. In a growing and developing community it is frequently desirable to extend train service to another station or terminus where no wye or turntable exists. The rear platform of each car is supplied with duplicate controller, air valves, etc. The controller is arranged in such manner as to give the motorman control over the engine as well as the electric current generated by the group.

As the ruling grades on the road do not exceed one-half of 1 per cent, it is expected that the average consumption of gasoline per revenue car mile will be 1 gal. for each 4 miles run. The St. Louis Car Company built the car bodies and trucks from designs of the Drake Railway Automotrice Company.

When the first car was delivered a few weeks ago it made the run of 576 miles over the Missouri Pacific Railroad, between St. Louis and Muskogee via Kansas City, at an average running speed of approximately 25 m.p.h. on its own power.




MINNESOTA WESTERN
36
U.S. MAIL
RAILWAY
POST OFFICE


MINNESOTA WESTERN
U.S. MAIL
RAILWAY
POST OFFICE
36

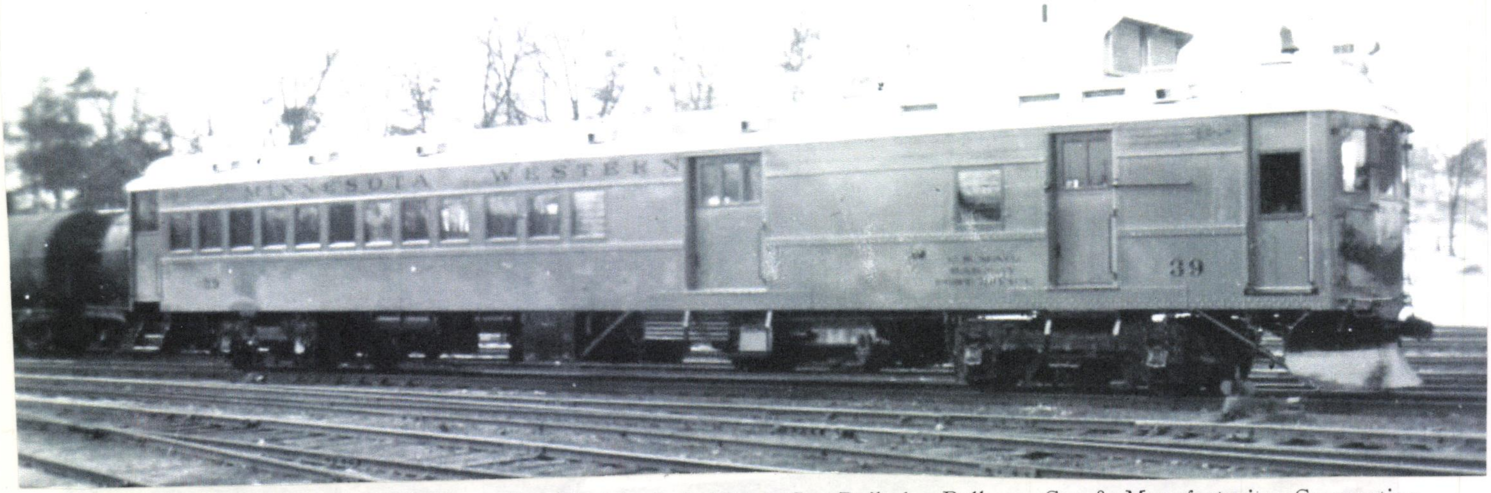


Fig. 1072—Detroit, Toledo & Ironton Gas-Electric Rail Motor Car Built by Pullman Car & Manufacturing Corporation and Equipped with Two Hall-Scott Gasoline Engines. Length, 72 ft. 6 in.; Weight, 132,000 lb.

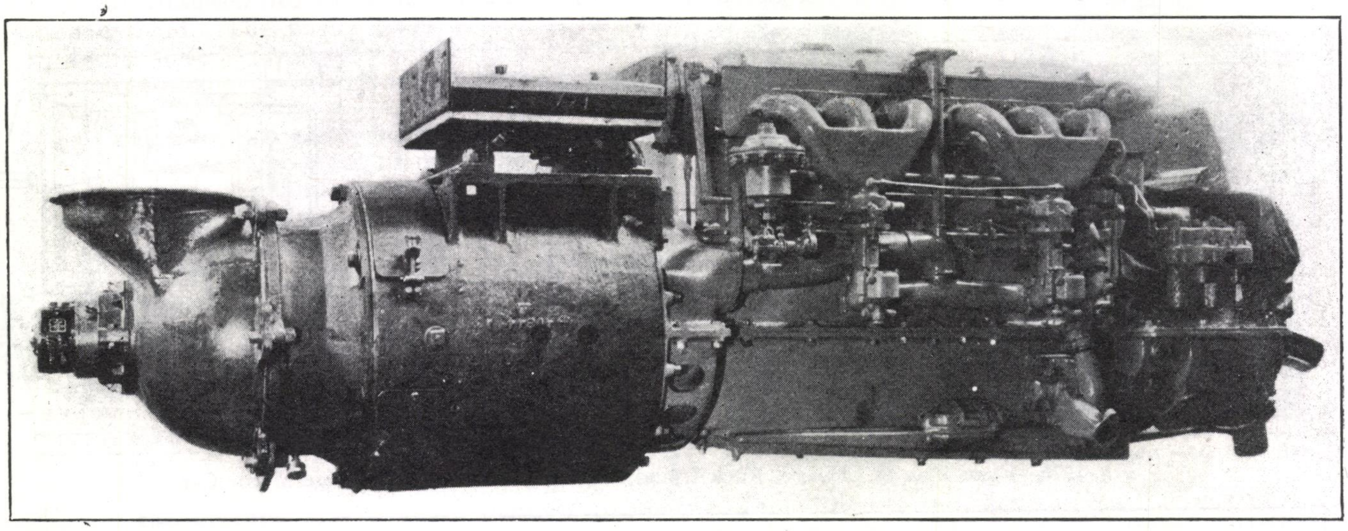


Fig. 1073—Hall-Scott 150-hp. Gasoline Engine, Built by American Car & Foundry Motors Company, Direct-Connected to Westinghouse 750-Volt Generator. Engine Has Six 5-in. x 7-in. Cylinders and Operates at 1750 r.p.m.

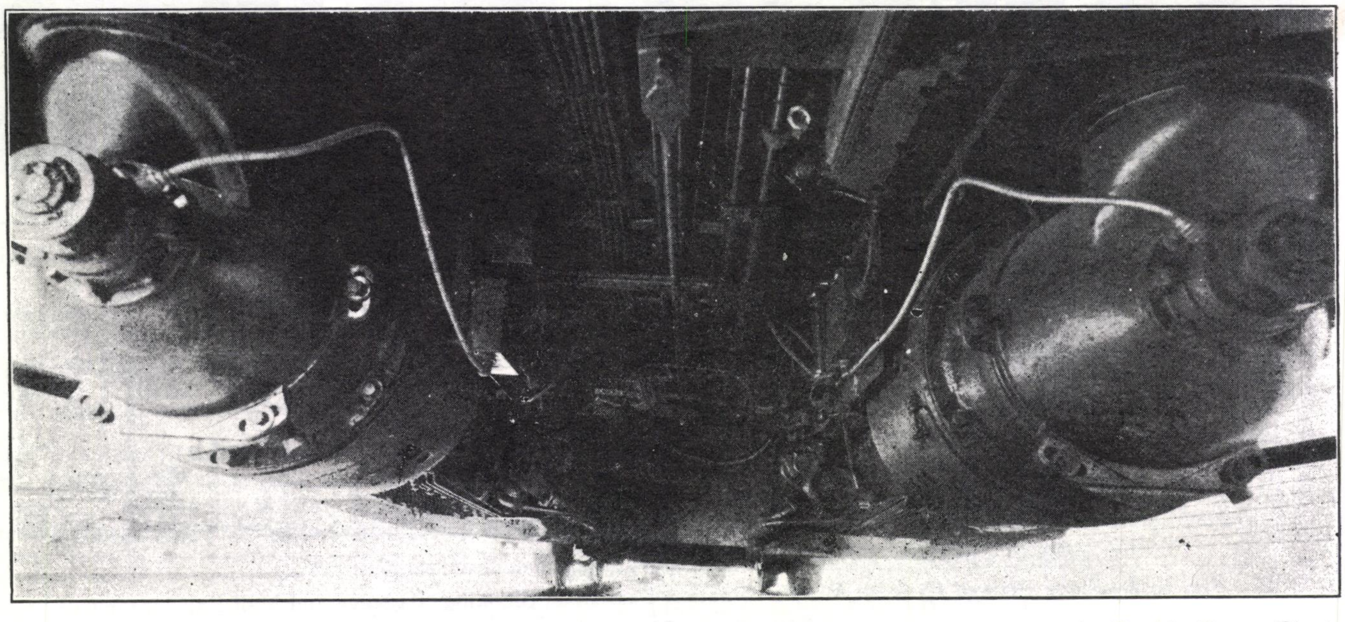


Fig. 1074—View Underneath D., T. & I. Gas-Electric Rail Motor Car Looking Forward Between the Double Power Plants.

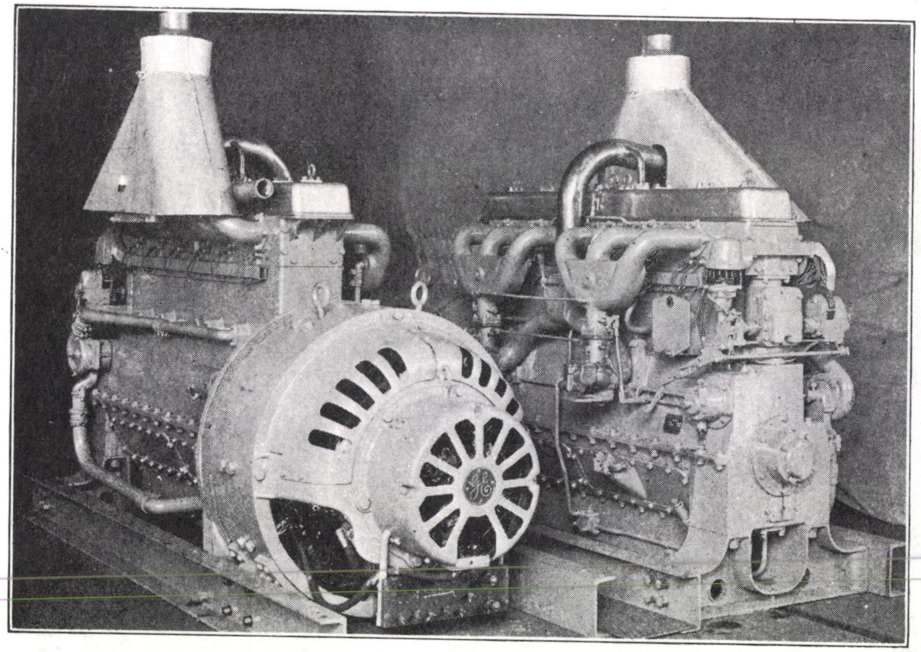


Fig. 1105—Double Power Plant for Gas-Electric Cars. A. C. F. Hall-Scott 275-Hp. Engine and General Electric Generator.

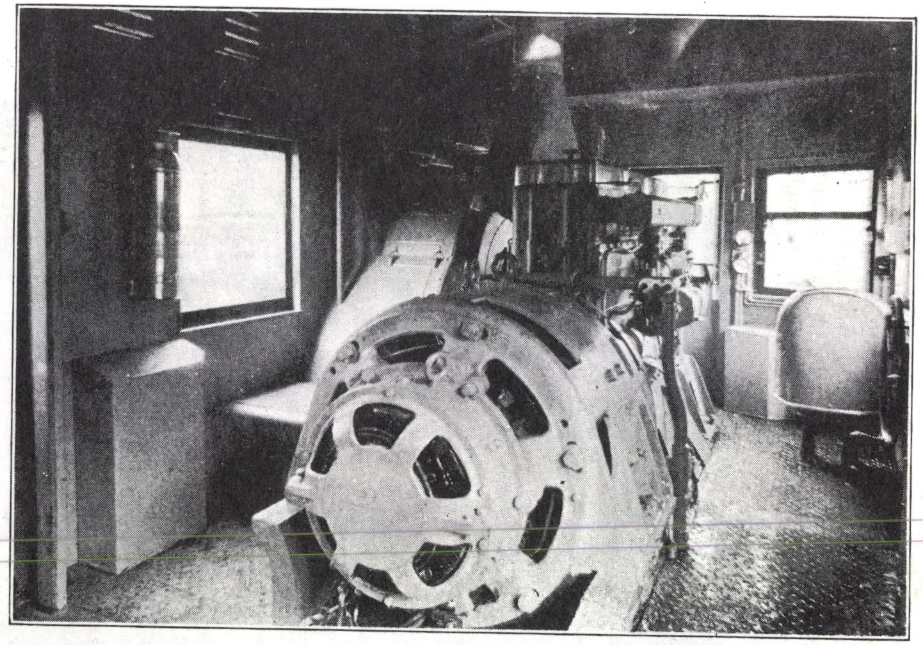


Fig. 1106—Power Plant and Operating Equipment of Brill-Westinghouse Gas-Electric Car.

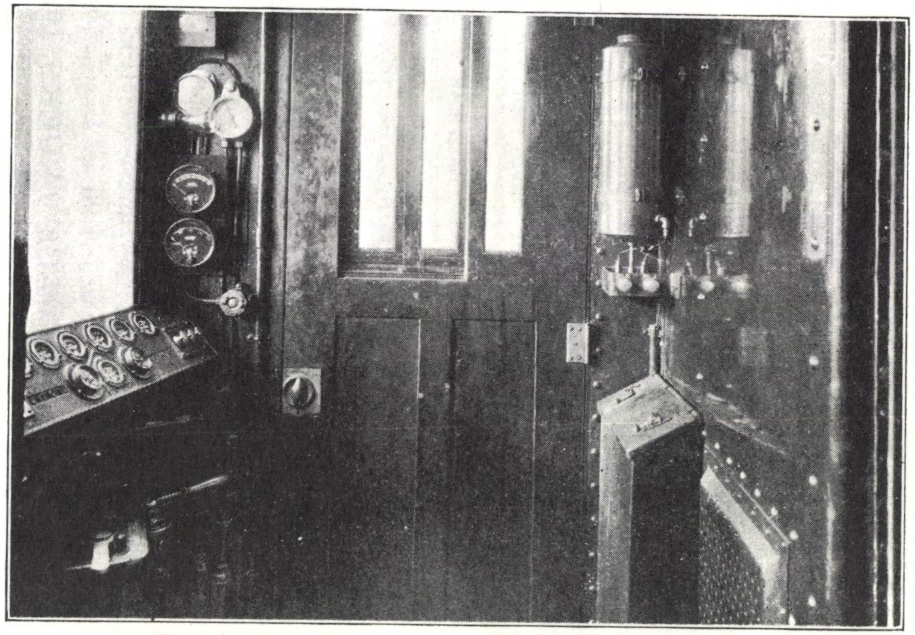


Fig. 1107—Control Compartment of D. T. & I. Gas-Electric Car.

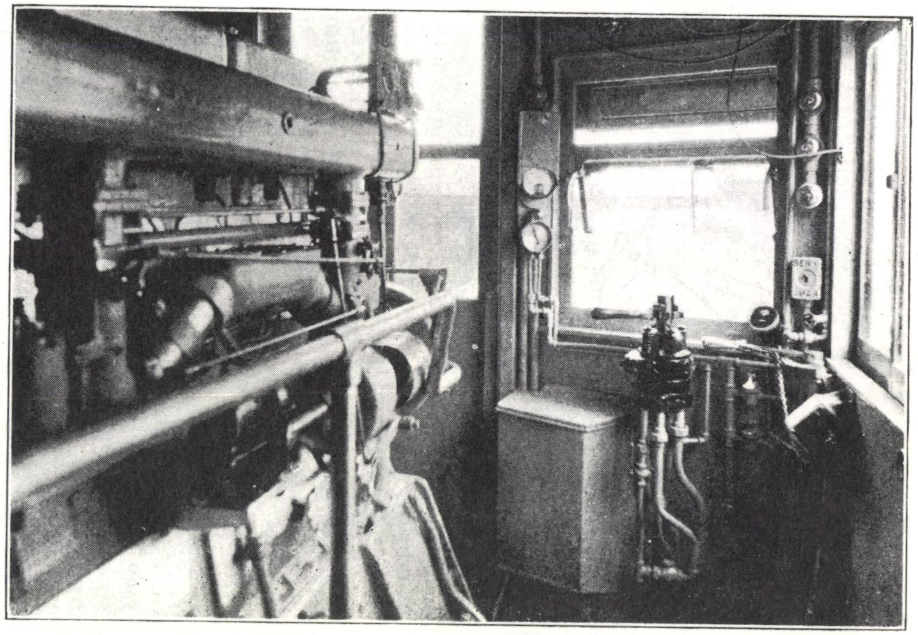


Fig. 1108—Operating Corner of Brill-Westinghouse Gas-Electric Car, Single Unit.

Soo Line Railroad Steam Locomotives

4-4-0 Class C

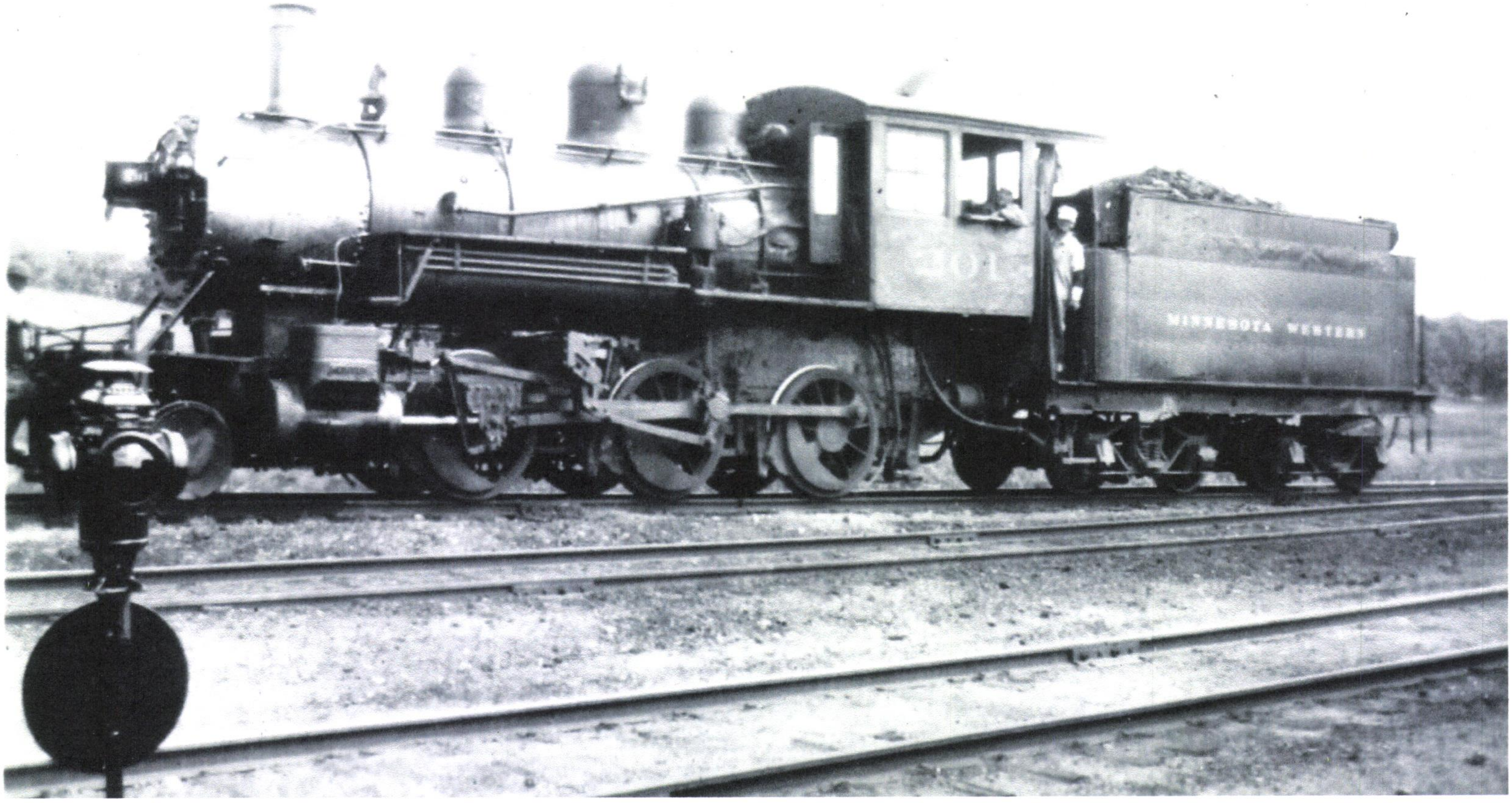
300-305 BLW 1886-1887: 16" x 24" cylinders, 63" drivers, 145 p.s.i., engine weight 75,450 lbs., tractive effort 12,020 lbs.

303 was built 11-1886, c/n 8259, class 16x24-64, as Minneapolis & Pacific Ry #14 "John Martin"; sold 7-1888 to MStP&SSM Ry. Sold to ESL Ry. 1920

2-6-0 Class D-2

108-172 ALCo (Schenectady) 1903-1907: 21" x 32" x 36" cylinders, 55" drivers, 200 p.s.i., engine weight 148,000 lbs., tractive effort 26,600 lbs.

143, 146 were built 2-1907, shop no. S416, c/n 41080, 41083, Class 21x32 1/2x36-55 Sold to ESL Ry 1923

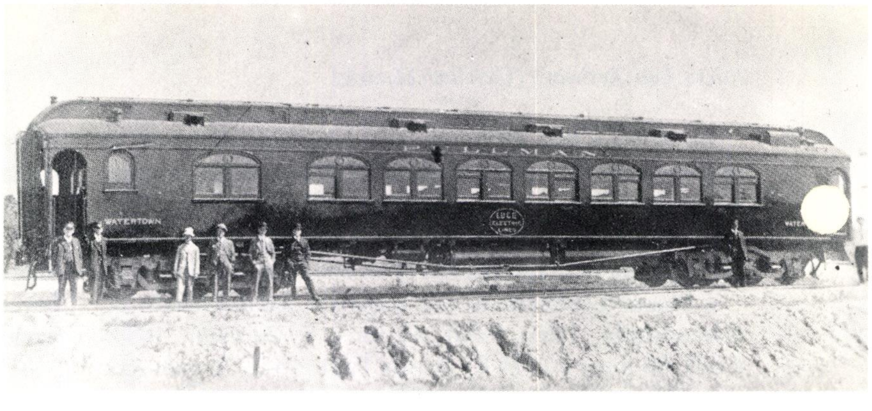


FREIGHT AND PASSENGER TRAILERS
(All second-hand unless noted)
June 30, 1920

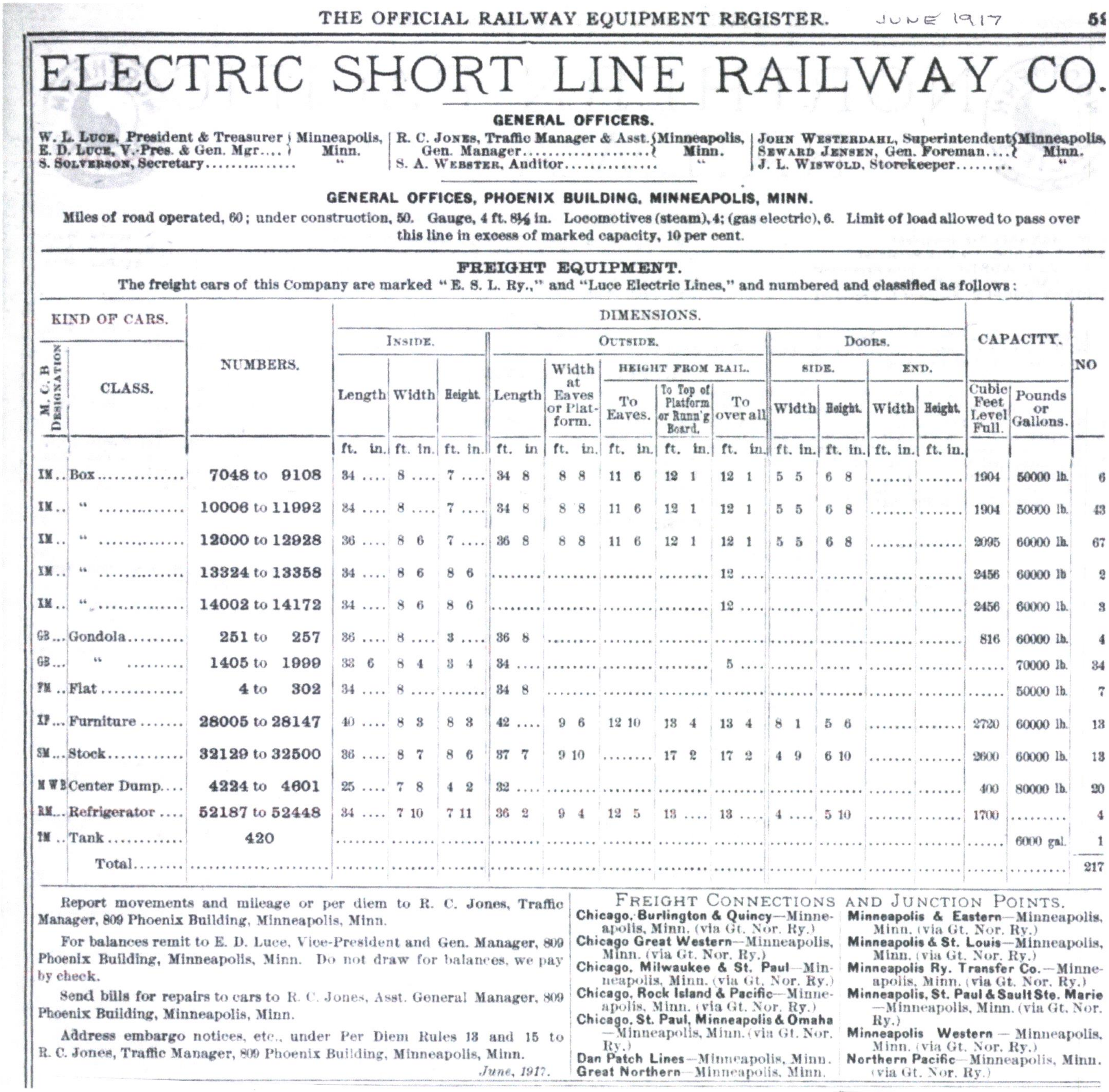
			Number Range From	To
8	Flat Cars	33' long	4	302
8	Flat Cars	34' long	201	1589
23	Gondola Cars	34' long	1407	1999
42	Box Cars	35' long	7048	11992
63	Box Cars	37' long	12000	14172
4	Furniture Cars	43' long	28068,28101,28123,28144	
10	Automobile Cars	41' long	28005	28147
4	Refrigerator Cars	35' long	52187,52379,52440,52448	
17	Stock Cars	34' to 37' long	32129	32500
1	Caboose	25' long		101

1	Air-operated Flanger		
1	Ditcher: American Hoist & Derrick Co. 1916?		(new?)
1	Ballast Spreader: Robinson Cary & Sands Co. 1916		(new)
1	Center Ballast Plow: Barnhart-Marion Steam Shovel Co. 1908		60
17	Rodgers Ballast Cars 1901 34' long	4225	4601
1	Rodgers Ballast Car equipped with a Snow Plow 34' long		4315

1	Sleeping Car Pullman 18?? 56' long; 6-wheel trucks		611
2	Sleeping Cars Pullman 1890 64' & 66' long; 6-wheel trucks	691	692
4	Passenger Cars 45' long; 4-wheel trucks	683,685,689,690	
9	Passenger Cars 48' to 51' long; 4-wheel trucks	608,612,615,617,619 621,636,653,654	
1	Passenger Car 52' long; 4-wheel trucks		614
1	Passenger-Baggage Car 53' long; 4-wheel trucks		54
1	Baggage Car Brill 1912 wood const. 35' long; 4-wheel trucks		55
2	Baggage Cars wood const. 39' long; 4-wheel trucks		51 and 53



Right: Pullman sleeping car "Watertown", also equipped with kitchenette, parlor, dining room, state room and baths. In the early years they were offered for charter by the day, week, or month, for placing on side tracks at various points overlooking Lake Minnetonka as vacation quarters. (Joe Hutchinson collection)



ELECTRIC SHORT LINE RAILWAY CO.

GENERAL OFFICERS.

W. L. Luce, President & Treasurer } Minneapolis,
E. D. Luce, V.-Pres. & Gen. Mgr.... } Minn.
S. Solverson, Secretary.............. "

R. C. Jones, Traffic Manager & Asst. } Minneapolis,
Gen. Manager.................... } Minn.
S. A. Webster, Auditor.............. "

John Westerdahl, Superintendent } Minneapolis,
Seward Jensen, Gen. Foreman.... } Minn.
J. L. Wiswold, Storekeeper......... "

GENERAL OFFICES, PHOENIX BUILDING, MINNEAPOLIS, MINN.

Miles of road operated, 60; under construction, 50. Gauge, 4 ft. 8½ in. Locomotives (steam), 4; (gas electric), 6. Limit of load allowed to pass over this line in excess of marked capacity, 10 per cent.

FREIGHT EQUIPMENT.

The freight cars of this Company are marked "E. S. L. Ry.," and "Luce Electric Lines," and numbered and classified as follows:

KIND OF CARS.		NUMBERS.	DIMENSIONS.												CAPACITY.		NO
			INSIDE.			OUTSIDE.					DOORS.						
								HEIGHT FROM RAIL.			SIDE.		END.				
M. C. B Designation	CLASS.		Length	Width	Height	Length	Width at Eaves or Platform.	To Eaves.	To Top of Platform or Runn'g Board.	To over all	Width	Height	Width	Height	Cubic Feet Level Full.	Pounds or Gallons.	
			ft. in.	ft. in.	ft. in.	ft. in	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.	ft. in.			
IM..	Box............	7048 to 9108	34	8	7	34 8	8 8	11 6	12 1	12 1	5 5	6 8	......	......	1904	50000 lb.	6
IM..	"	10006 to 11992	34	8	7	34 8	8 8	11 6	12 1	12 1	5 5	6 8	......	......	1904	50000 lb.	43
IM..	"	12000 to 12928	36	8 6	7	36 8	8 8	11 6	12 1	12 1	5 5	6 8	......	......	2095	60000 lb.	67
IM..	"	13324 to 13358	34	8 6	8 6	......	......	......	......	12	......	......	......	......	2456	60000 lb	2
IM..	"	14002 to 14172	34	8 6	8 6	......	......	......	......	12	......	......	......	......	2456	60000 lb.	3
GB...	Gondola.........	251 to 257	36	8	3	36 8	......	......	......	......	......	......	......	......	816	60000 lb.	4
GB...	"	1405 to 1999	33 6	8 4	3 4	34	......	......	......	5	......	......	......	......	......	70000 lb.	34
FM..	Flat............	4 to 302	34	8	......	34 8	......	......	......	......	......	......	......	......	......	50000 lb.	7
IF...	Furniture.......	28005 to 28147	40	8 3	8 3	42	9 6	12 10	13 4	13 4	8 1	5 6	......	......	2720	60000 lb.	13
SM...	Stock...........	32129 to 32500	36	8 7	8 6	37 7	9 10	......	17 2	17 2	4 9	6 10	......	......	2600	60000 lb.	13
MWB	Center Dump....	4224 to 4601	25	7 8	4 2	32	......	......	......	......	......	......	......	......	400	80000 lb.	20
RM...	Refrigerator....	52187 to 52448	34	7 10	7 11	36 2	9 4	12 5	13	13	4	5 10	......	......	1700	......	4
TM..	Tank............	420	......	......	......	......	......	......	......	......	......	......	......	......	......	6000 gal.	1
	Total.......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	217

Report movements and mileage or per diem to R. C. Jones, Traffic Manager, 809 Phoenix Building, Minneapolis, Minn.

For balances remit to E. D. Luce, Vice-President and Gen. Manager, 809 Phoenix Building, Minneapolis, Minn. Do not draw for balances, we pay by check.

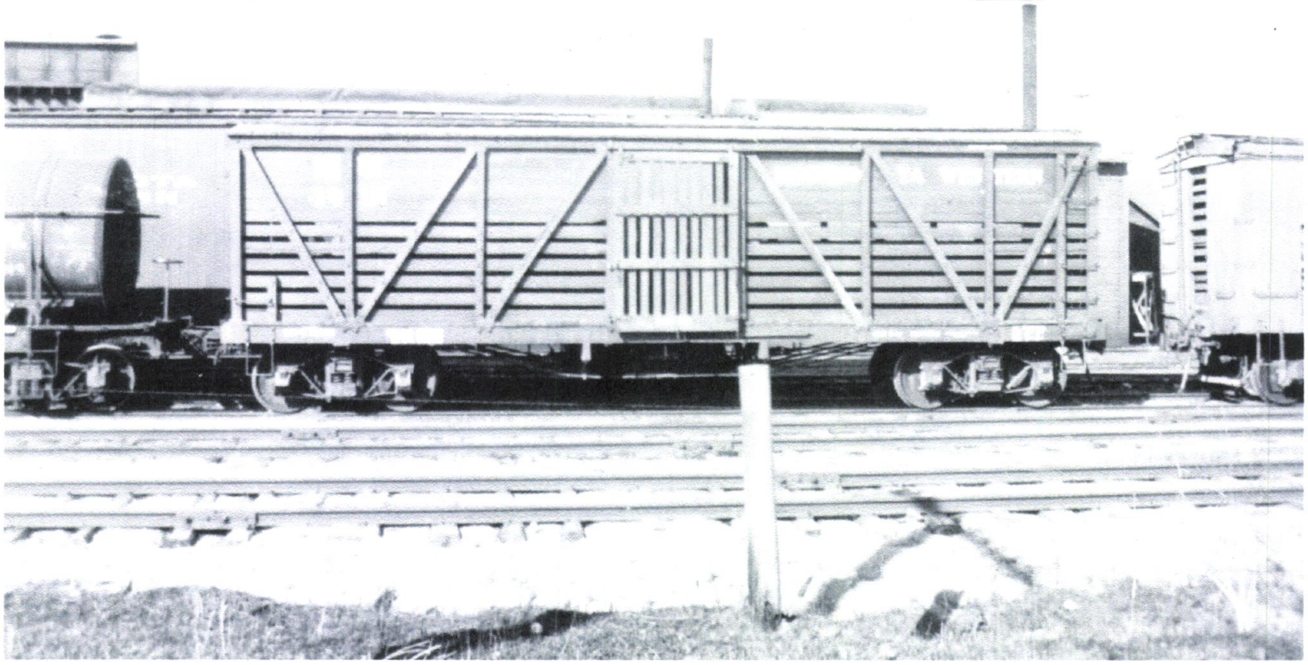
Send bills for repairs to cars to R. C. Jones, Asst. General Manager, 809 **Phoenix Building, Minneapolis, Minn.**

Address embargo notices, etc., under Per Diem Rules 13 and 15 to R. C. Jones, **Traffic Manager**, 809 Phoenix Building, Minneapolis, Minn.

June, 1917.

FREIGHT CONNECTIONS AND JUNCTION POINTS.

Chicago, Burlington & Quincy—Minneapolis, Minn. (via Gt. Nor. Ry.)
Chicago Great Western—Minneapolis, Minn. (via Gt. Nor. Ry.)
Chicago, Milwaukee & St. Paul—Minneapolis, Minn. (via Gt. Nor. Ry.)
Chicago, Rock Island & Pacific—Minneapolis, Minn. (via Gt. Nor. Ry.)
Chicago, St. Paul, Minneapolis & Omaha—Minneapolis, Minn. (via Gt. Nor. Ry.)
Dan Patch Lines—Minneapolis, Minn.
Great Northern—Minneapolis, Minn.
Minneapolis & Eastern—Minneapolis, Minn. (via Gt. Nor. Ry.)
Minneapolis & St. Louis—Minneapolis, Minn. (via Gt. Nor. Ry.)
Minneapolis Ry. Transfer Co.—Minneapolis, Minn. (via Gt. Nor. Ry.)
Minneapolis, St. Paul & Sault Ste. Marie—Minneapolis, Minn. (via Gt. Nor. Ry.)
Minneapolis Western—Minneapolis, Minn. (via Gt. Nor. Ry.)
Northern Pacific—Minneapolis, Minn. (via Gt. Nor. Ry.)



1016 CATTLECAR

MINNESOTA WESTERN RY.
DIESEL-ELECTRIC LOCOMOTIVES

No.	Model	Service	Built	Serial #	H.P.	Weight	T.E.
1	VO-660	Switcher	9-42	64394	660	196,500	

Built by Baldwin Locomotive Works; contract #285 dated 10-1-42: purchase diesel locomotive #100.

Became MN&S Ry. 61 12-55. Sold to Cargo Carriers Inc., Savage, Minn., as their #122 prior to 1968.

51	H10-44	Switcher	9-46	L1019	1000	238,680	71,580

Fairbanks-Morse Co., builder. MW Ry. color scheme: black frame, blue-gray body, red stripe, white top.

Became MN&S Ry. 11 12-55. Sold 5-76 to Hallet Dock Co., Duluth, Minn., as their #HD-11.

10	H12-44	Switcher	1-51	12L427	1200	249,600	74,700

Fairbanks-Morse Co., builder. MN&S Ry. color scheme.

Became MN&S Ry. 10 12-55. Stored 4-78; used one week in 6-79; stored 6-79. Sold 7-83 to Central Wisconsin R.R. Corp. Last used Mar.-Apr. 1985. On display 5-85 at Milton Jct., Wisconsin, (diesel engine removed and sold).

ELECTRIC SHORT LINE / MINNESOTA WESTERN RAILROAD FINANCIALS

ELECTRIC SHORT LINE RAILWAY			
COST OF ROAD AND EQUIPMENT			
	Total Cost 1/1/1914	Additions	Total Cost 6/30/1914
ROAD			
Engineering and Superintendence	15,330	4,443	19,773
Right of Way	34,122	44,137	78,259
Other Land		5,597	5,597
Grading		36,246	36,246
Ties		26,540	26,540
Rails, Fastenings and Joints		30,727	30,727
Track Laying and Surfacing		29,304	29,304
Roadway Tools		2	2
Tunnels	228,259	-	228,259
Bridges, Trestles and Culverts		18,617	18,617
Crossings, Fences, Cattle Guards, Signs		2,595	2,595
Telegraph and Telephone Lines		66	66
Shops and Carhouses		909	909
Stations, Waiting Rooms, Misc. Buildings		550	550
Shop Equipment		235	235
Park and Resort Property		6,528	6,528
Cost of Road Purchased	333,000		333,000
Total Road	610,711	206,497	817,207
EQUIPMENT			
Cars		74,810	74,810
Locomotives		4,075	4,075
Electric Equipment of Cars	30,116		30,116
Total Equipment	30,116	78,885	109,002
GENERAL			
Law Expenses		55	55
Taxes		172	172
Miscellaneous	87,228	4,586	91,814
Total General	87,228	4,813	92,041
TOTAL COST	728,055	290,195	1,018,250

ELECTRIC SHORT LINE RAILWAY

COST OF ROAD AND EQUIPMENT

Year Ended June 30th		Way and Structures	Equipment	General & Misc.	Total
1914	Balance Forward	817,207	109,002	92,041	1,018,250
1915	New Lines and Extensions	243,422	-	14,878	258,300
1915	Additions and Betterments	25,887	53,785		79,672
	Todate	1,086,516	162,787	106,919	1,356,222
1916	New Lines and Extensions	315,136		13,554	328,690
1916	Additions and Betterments	42,113	44,891	556	87,560
	Todate	1,443,765	207,678	121,029	1,772,472
Year Ended Dec. 31st					
1915	Steam Railroad table				1,627,662
1916	Additions and Betterments	62,097	5,520		67,617
1916	New Lines and Extensions	263,589	2,463	37,170	303,222
					1,998,501
1917	Additions and Betterments	11,419	(25,919)	219,900	205,399
					2,203,900
1918	Additions and Betterments	(9,412)	16,689		7,277
					2,211,177
1919	Additions and Betterments	6,205	(1,772)		4,434
					2,215,611
1920	Additions and Betterments	18,040	(19,750)		(1,710)
					2,213,901
1921	Additions and Betterments	8,980	(6,471)	36	2,546
					2,216,447
1922	Additions and Betterments	337,307	11,435	13,602	362,344
					2,578,791
1923	New Lines and Extensions				84,234
1923	Additions and Betterments	(8,662)	4,222	10,000	5,560
					2,668,585
	Unexplained Difference				(53,517)
	1924 Report				2,615,068
1924	Additions and Betterments	30,563	2,259		32,823
					2,647,891
MINNESOTA WESTERN RAILROAD					
1923	Per 1924 Report				2,703,162
1924	Additions and Betterments	1,888	2,856	145	4,889
					2,708,051
1924	Per 1925 Report				1,443,620
1925		9,699	(1,895)	511	9,116
					1,452,736
1926	New Lines and Extensions	128,171			128,171
1926	Additions and Betterments	39,814	3,793	231	43,838
					1,624,745
1927	New Lines and Extensions	487,712			487,712
1927	Additions and Betterments	9,172	31,946		41,118
					2,153,575

							2,153,575
1928				139,590	(4,563)	(145)	134,882
							2,288,457
1929				9,250	85		9,335
							2,297,792
1930				19,573	31	(40)	19,564
							2,317,356
1931				(447)			(447)
							2,316,909
1932				(4,723)	(36,699)	(61)	(41,483)
							2,275,426
MINNESOTA WESTERN RAILWAY							
1932							100,003
1932				1,514			1,514
							101,517
1933				3,437	(200)		3,237
							104,754
1934				8,575	(1,200)	528	7,903
							112,657
1935				4,200	(975)	87	3,312
							115,969
1936				6,358	(7,096)		(738)
							115,231
1937				7,086	1,761		8,847
							124,078

LIABILITIES

Stock, capital stock	$2, 500, 000. 00
Current liabilities:	
Loans and bills payable	22, 765. 00
Miscellaneous accounts payable	5, 275. 18
Total	28, 040. 18
Unadjusted credits, tax liability	238. 15
Corporate surplus, profit and loss, debit balance	22, 417. 24
Grand total	2, 505, 861. 09

VALUATION DOCKET NO. 998, ELECTRIC SHORT LINE RAILWAY COMPANY

Location and general description of property.—The railroad of the Electric Short Line Railway Company, is a single-track, standard-gauge, steam railroad, located in southeastern Minnesota. The main line extends westerly from Luce Line Junction to Hutchinson, 55.133 miles. The Electric Short Line Railway also owns 7.931 miles of yard tracks and sidings. Its road thus embraces 63.064 miles of all tracks owned and used. In addition it has trackage rights over the double-track road of the carrier between Luce Line Junction and the terminal depot at Holden and Seventh Streets, Minneapolis, 3.06 miles.

Capital stock and long-term debt.—The Electric Short Line Railway has outstanding, on date of valuation, a total par value of $3,706,850 in stock and long-term debt, of which $1,506,550 represents common stock, $1,400,300 preferred stock, and $800,000 funded debt.

Results of corporate operations.—For the period from February, 1914, to date of valuation, the aggregate railway operating expenses have been 106.42 per cent of the railway operating revenues. The ratios and the net railway operating income or deficit for the period from February to June 30, 1914, for the years ended June 30, 1915 and 1916, for the six months ended December 31, 1916, for the years ended December 31, 1917 to 1919, and for the six months ending on date of valuation are given below. No dividends have been declared.

Period	Ratio	Income	Period	Ratio	Income
Year 1914 [1]	63. 2	$3, 651	Year 1917	119. 0	[3] $29, 055
Year 1915	69. 0	12, 830	Year 1918	102. 4	[3] 6, 706
Year 1916	86. 3	3, 417	Year 1919	111. 2	[3] 28, 709
Year 1916 [2]	97. 7	[3] 6, 094	Year 1920 [2]	118. 7	[3] 53, 025

[1] Five months. [2] Six months. [3] Deficit.

JOSHUA MEIER 07250

Original cost to date.—The original cost to date of the common-carrier property of the Electric Short Line Railway can not be ascertained, as the necessary records are not obtainable. Such information respecting actual expenditures as can be ascertained is stated in Appendix 2.

Investment in road and equipment.—The investment of the Electric Short Line Railway in road and equipment, including land, on date of valuation, is stated in its books as $2,217,911.26. With readjustments required by our accounting examination, this amount would be reduced to $2,181,473.48, all of which represents undetermined considerations or considerations other than money, the cash value of which at the time of the transaction we are not able to report, because it has been impossible to obtain the information. The adjusted amount may include some or all of the cost of the noncarrier lands and structures owned. Further information will be found in Appendix 2.

Cost of reproduction new and cost of reproduction less depreciation.—The cost of reproduction new and cost of reproduction less depreciation of all common-carrier property, other than land and material and supplies, owned and used by the Electric Short Line Railway, are $1,353,748 and $1,150,249, respectively. These amounts, classified in conformity with the classification of expenditures for road and equipment as prescribed by us, are shown in a summary sheet in Appendix 1.

Cost of lands, rights of way, and terminals at time of dedication to public use, and their present value.—The Electric Short Line Railway owns and uses for common-carrier purposes 777.81 acres of lands. The total original cost of these lands can not be ascertained, as the necessary records are not obtainable, but data thereon will be found in Appendix 2. Their present value is $253,336.

Property held for purposes other than those of a common carrier.—The Electric Short Line Railway owns and holds for noncarrier purposes 24.43 acres of lands. The original cost of these lands can not be ascertained, as the necessary records are not obtainable, but data thereon will be found in Appendix 2. Their present value is $5,776. The present value of noncarrier structures on carrier land is $8,900.

The Electric Short Line Railway does not record as such any investment in miscellaneous physical property on date of valuation. However, if its books were adjusted as indicated by our accounting examination, the miscellaneous physical property account would show an investment of $36,437.78, representing costs incurred during 1916 on an extension west of Hutchinson, on which construction was discontinued during the fall of that year and has not been resumed at date of valuation. This property has not been included in our inventory.

Aids, gifts, grants of rights of way, and donations.—Of the lands included in the preceding statement of carrier lands owned and used by the Electric Short Line Railway, 54.96 acres, with a present value of $13,571, were acquired through aids, the title thereto having been conveyed by deeds reciting merely nominal considerations. We are not able to report the value of these lands at the time acquired. In addition, the accounting records show that the Electric Short Line Railway has received $410.50 through donation.

Material and supplies.—The book value of the material and supplies on hand, on date of valuation, is shown in the records of the Electric Short Line Railway as $23,686.35.

Final value.—After careful consideration of all facts herein contained, including appreciation, depreciation, going-concern value, working capital, and all other matters which appear to have a bearing upon the value here reported, the value, for rate-making purposes, of the property of the Electric Short Line Railway, owned and used, devoted by it to common-carrier purposes, is found to be $1,502,299. The sum of $27,299 is included in the value above stated on account of working capital, including material and supplies. No other values or elements of value to which specific sums can now be ascribed are found to exist.

Appendixes.—Attached hereto and made a part hereof are Appendixes 1, 2, and 3. Appendix 1 gives the explanatory text and summary sheet showing the classification of the cost of reproduction new and cost of reproduction less depreciation, above set forth, in conformity with the classification of expenditures for road and equipment prescribed by us. Appendix 2 shows in detail the history and organization of the Electric Short Line Railway, moneys and other considerations received by reason of issues of stocks, bonds, and other securities, together with the syndicating, banking, and other financial arrangements attending their issue; the net and gross earnings; the development of fixed physical property; investment in road and equipment; the cost of lands, rights of way, and terminals; the general balance sheet statement; and other pertinent information. Appendix 3 is a statement of the method for determining working capital.

Reference is made to Appendix 3, *Texas Midland Railroad*, 75 I. C. C. 1, 108, which is hereby made a part hereof, for a statement of the methods employed and of the reasons for the differences between the various cost values reported.

The accounting, engineering, and land reports, copies of which have been furnished to interested parties and the State officials of the State in which the Electric Short Line Railway is situated, give the details respecting the figures here reported, and are on file in the

Bureau of Valuation of the commission, open to public inspection, and subject to the direction of Congress. These reports are referred to for greater particularity as to the matters herein stated.

APPENDIX 1

Terminals.—The Electric Short Line Railway has joint use of the passenger terminal at Minneapolis, Minn., jointly owned by the carrier and the Minneapolis, Northfield and Southern Railway. It also has joint use of a freight depot at Minneapolis, Minn., owned by T. B. Walker, a private party. The company owns its station facilities at Hutchinson, Minn.

Traffic connections.—The Electric Short Line Railway has direct connection for interchange of traffic with the road of the carrier at Luce Line Junction, Minn., and through its trackage rights over the latter's tracks connects with practically all railroads diverging from Minneapolis.

Physical conditions affecting construction.—The country traversed by this road for the first 30 miles is rather rough with many curves and heavy grades. The watershed between Bassett's Creek and the Crow River is crossed in this section. The remainder of the country is slightly undulating, with few curves and light grades. The Crow River is crossed at Watertown, and a lake about 800 feet wide is crossed at Winsted. The soil is a black loam, running to clay in the rougher sections.

Economic conditions relating to traffic.—This region is highly developed agriculturally, producing principally grain, hay, and sugar beets. Truck gardening is engaged in extensively near Minneapolis. Considerable attention is also given to stock raising and dairying. The industries of Minneapolis furnish a large percentage of the road's business. Local industries consist of a few flour mills and canning and tile factories.

Physical characteristics of road.—The grading is comparatively heavy, averaging about 24,000 cubic yards per mile, and is all common material. The only metal bridge on the road is the crossing of the Great Northern Railway tracks 12 miles west of Luce Line Junction which is a 120-foot truss span on two concrete abutments. Trestle bridges are quite numerous and are used in crossing bays along the lakes and marshy places. The crossties in the main track average about 3,100 per mile and are untreated tamarack and cedar. The rail in the main track ranges from 60 to 80 pounds, most of which is relay. The tracks are ballasted with gravel.

Equipment.—The Electric Short Line Railway owns and uses 3 steam locomotives and 1 air operated flanger, 180 freight-train cars, 24 passenger-train cars, 18 units of work equipment, and 2 units of miscellaneous equipment.

Engineering and general expenditures.—Engineering has been estimated at 4 per cent on road accounts 3 to 47. General expenditures, exclusive of interest, have been estimated at 1.5 per cent on road accounts 1 to 47, exclusive of account 2. Interest during construction has been estimated for one-half the construction period of 14 months, plus 3 months, at 6 per cent per annum on all road and general-expenditures accounts, except accounts 2 and 76. Interest on equipment has been estimated for 3 months at 6 per cent per annum.

SUMMARY

Owned and used

Account	Classes	Cost of reproduction new	Cost of reproduction less depreciation
	I. ROAD		
1	Engineering	$41,411	$41,411
3	Grading	362,135	362,109
6	Bridges, trestles, and culverts	67,287	39,768
8	Ties	105,000	52,500
9	Rails	169,828	152,066
10	Other track material	26,186	17,842
11	Ballast	73,650	55,237
12	Tracklaying and surfacing	114,280	84,567
13	Right-of-way fences	10,921	5,461
14	Snow and sand fences and snowsheds	122	61
15	Crossings and signs	17,163	12,856
16	Station and office buildings	28,763	23,742
17	Roadway buildings	10,794	8,218
18	Water stations	7,977	6,378
19	Fuel stations	822	620
20	Shops and engine houses	13,550	11,107
26	Telegraph and telephone lines	15,430	13,113
31	Power-transmission systems	40	36
32	Power-distribution systems	90	85
33	Power-line poles and fixtures	105	95
37	Roadway machines	6,910	5,856
38	Roadway small tools	560	280
44	Shop machinery	3,650	2,905
	Total, 1, and 3 to 47, inclusive	1,076,674	896,313
	II. EQUIPMENT		
51	Steam locomotives	16,716	15,192
53	Freight-train cars	58,309	57,923
54	Passenger-train cars	120,285	111,873
57	Work equipment	6,790	6,775
58	Miscellaneous equipment	1,134	519
	Total, 51 to 58, inclusive	203,234	192,282
	III. GENERAL EXPENDITURES		
71	Organization expenses	16,150	13,40
72	General officers and clerks		
73	Law		
74	Stationery and printing		
75	Taxes		
77	Other expenditures, general		
76	Interest during construction	57,690	48,249
	Total, 71 to 77, inclusive	73,840	61,654
	Grand total, 1, and 3 to 77, inclusive	1,353,748	1,150,249

APPENDIX 2

INTRODUCTORY

The Electric Short Line Railway is a corporation of the State of Arizona, having its principal office at Phoenix, Ariz., and its general accounting office at Minneapolis, Minn. It is controlled by the Minnesota Construction Company through ownership of a majority of the capital stock. The intermediary through which control was established was the Phoenix Loan & Investment Company. The records reviewed indicate that the above companies were all controlled by the Luce interests of Minneapolis, Minn. On the other hand the records do not indicate that this company controls any common-carrier corporation. The property of the Electric Short Line Railway has been operated by its own organization during its entire life.

CORPORATE HISTORY

The Electric Short Line Railway was incorporated December 1, 1908, under the general laws of the State of Arizona, for the purpose of conducting a general transportation business. The date of organization was December 1, 1908.

DEVELOPMENT OF FIXED PHYSICAL PROPERTY

The owned mileage of the Electric Short Line Railway, 55.133 miles, was acquired by construction. The years in which the various portions of the line were constructed are indicated in the following table:

	Mileage
Luce Line Junction to Parker Lake, Minn., June, 1909, to Jan. 19, 1914	6. 94
Parkers Lake to Stubbs Bay, Minn., Apr. 1913, to June 2, 1914	7. 78
Stubbs Bay to Winsted, Minn., Oct., 1914, to Feb. 13, 1915	22. 44
Winsted to Hutchinson, Minn., Aug., 1915, to Feb. 28, 1916	17. 24
Total recorded mileage	54. 400
Difference between total recorded mileage and mileage inventoried as of date of valuation	0. 733
Mileage inventoried as of date of valuation	55. 133

Some 8 miles of the above road were sufficiently completed that rails had been laid thereon and some 25 miles had been partially constructed prior to 1912 either by or through the Phoenix Loan & Investment Company for account of the Electric Short Line Railroad Company, the name of which was later changed to Electric Short Line Terminal Company. This particular property was either acquired direct by the Electric Short Line Railway or the contract therefor was assigned to it. The portion on which rails had been laid and the portion partially constructed can not be identified from the records reviewed. Some work was done during 1916 on an extension westerly from Hutchinson, but was discontinued in the fall of that year and had not been resumed to date of valuation. The above road was constructed partly by H. F. Balch & Company and others under contract, and partly by company forces. The records reviewed do not indicate that any of the contractors were affiliated with the Electric Short Line Railway

HISTORY OF CORPORATE FINANCING

Syndicating, banking, and other financial arrangements.—The records reviewed do not indicate that any syndicating arrangements have been made in connection with issuance of securities.

Capital stock and long-term debt.—From the date of its incorporation to date of valuation, the Electric Short Line Railway has issued capital stock and funded debt and incurred nonnegotiable debt to affiliated companies, as indicated by its records, aggregating $9,285,494.37 par value of which $3,706,850 is actually outstanding. The details are summarized in the following table:

Class	Issued or incurred	Retired or held by the company	Actually outstanding
Stock, capital stock, par value:			
Common	$4, 000, 000. 00	$2, 493, 450. 00	$1, 506, 550. 00
Preferred	3, 500, 000. 00	2, 099, 700. 00	1, 400, 300. 00
Total	7, 500, 000. 00	4, 593, 150. 00	2, 906, 850. 00
Long-term debt:			
Funded debt, par value, issued	840, 000. 00	40, 000. 00	800, 000. 00
Nonnegotiable debt to affiliated companies, incurred	945, 494. 37	945, 494. 37	
Grand total	9, 285, 494. 37	5, 578, 644. 37	3, 706, 850. 00

The securities held by or for the Electric Short Line Railway consist of $2,493,450 par value of its common stock, $2,099,700 par value of its preferred stock, and $40,000 par value of its funded debt.

Capital stock.—The authorized capital stock is $100,000,000 par value, of which $50,000,000, divided into shares of $50 par value each, is classified as common, and $50,000,000, divided into shares of $100 par value each, is classified as preferred. This company has issued, reacquired, and resold capital stock for the following recorded considerations:

Par value	Consideration	Recorded value
Issued $7, 500, 000	Property purchased from the Electric Short Line Railsoad Company or the Phoenix Loan & Investment Company, as agent for that company	$7, 500, 000
Reacquired $6, 861, 500	Unapportioned part of above property (stock returned by the Electric Short Line Railroad Company in consideration for the exclusive right to locate all stations and to acquire all land for townships along the line of railroad purchased by this company)	6, 861, 500
Resold $1, 188, 100	Indeterminable.	
1, 080, 250	Given as a bonus with preferred stock sold.	
2, 268, 350	Total par value resold.	
4, 593, 150	Net par value reacquired.	
Held $4, 593, 150		
Outstanding $2, 906, 850		

An examination of the accounts of the Electric Short Line Railway discloses that it has charged to general balance sheet account, Discount on Capital Stock, items aggregating $1,385,440.55 to date of valuation. No further information concerning these items is obtainable from the records reviewed. Commissions and other expenses incurred in the amount of $267,360.07 in connection with preferred stock sold was charged to the investment in road and equipment account.

Funded debt.—The Electric Short Line Railway issued first-mortgage 5 per cent bonds dated September 15, 1916, due July 1, 1931, aggregating $840,000 par value, of which $800,000 is actually outstanding and $40,000 held by or for the company. The funded debt outstanding, of $800,000 par value, was issued in part settlement of advances by J. E. Luce and the Phoenix Loan & Investment Company at a recorded value of $640,000 (discount $160,000). The discounts aggregating $160,000 and expense incurred in the amount of $3,385.25 in the issuance of such securities, were charged to balance sheet account, Discount on Funded Debt.

Nonnegotiable debt to affiliated companies.—The Electric Short Line Railway has incurred nonnegotiable debt to the Phoenix Loan & Investment Company or to J. E. Luce, aggregating $945,494.37 to date of valuation, classified as open accounts, all of which has been repaid. The considerations recorded as passed in connection with the incurring and repayment of this debt were as detailed hereunder:

Amount	Consideration	Recorded value
Incurred		
$465, 150. 70	Cash	$465, 150. 70
	Charged to investment in road and equipment account for—	
151, 212. 02	Salaries, legal and other expenses	151, 212. 02
24, 490. 11	Interest	24, 490. 11
299, 563. 76	Other transactions, character not determined	299, 563. 76
5, 077. 78	Interest	5, 077. 78
945, 494. 37	Total incurred for considerations	945, 494. 37
Repaid		
$132, 318. 60	Cash	132, 318. 60
640, 000. 00	Funded debt issued, $800,000 par value	640, 000. 00
173, 175. 77	Other transactions, character not determined	173, 175. 77
945, 494. 37	Total repaid with considerations	945, 494. 37
Owing None.		

Short-term notes.—The Electric Short Line Railway has issued short-term notes of $29,422.80 par value to date of valuation, all of which are outstanding. The consideration recorded as passed in connection with the issuance of these notes was cash.

RESULTS OF CORPORATE OPERATIONS

The results of corporate operations, as shown in the income and profit and loss accounts, are given below.

Income statement.—A condensed summary of the income account for the year ending on date of valuation and for the period February, 1914, to date of valuation follows:

	Year	Period
Operating income:		
Railway operating revenues	$190, 894. 32	$785, 106. 92
Railway operating expenses	253, 690. 99	835, 517. 95
Net deficit from railway operations	62, 796. 67	50, 411. 03
Railway tax accruals	11, 033. 45	44, 247. 13
Uncollectible railway revenues	5. 30	38. 89
Railway operating deficit	73, 835. 42	94, 697. 05
Expenses of miscellaneous operations	301. 45	1, 959. 90
Total operating deficit	74, 136. 87	96, 656. 95
Nonoperating income:		
Hire of equipment	22, 019. 86	57, 386. 07
Miscellaneous rent income		35. 60
Income from unfunded securities and accounts	50. 40	3, 168. 23
Total	22, 070. 26	60, 589. 90
Gross deficit	52, 066. 61	36, 067. 05
Deductions from gross income:		
Hire of equipment	500. 38	1, 205. 84
Joint-facility rents	25, 200. 00	63, 211. 11
Miscellaneous rents	172. 51	172. 51
Interest on funded debt	40, 000. 00	150, 000. 00
Interest on unfunded debt	7, 154. 59	7, 364. 59
Total	73, 027. 48	221, 954. 05
Total deficit	125, 094. 09	258, 021. 10
Disposition of net income, income debit balance transferred to profit and loss	125, 094. 09	258, 021. 10

An examination shows that, under the present classification of accounts, an item of $20,000 included in profit and loss account, donations representing amount received from the United States Railroad Administration in lieu of certain freight divisions would be includible in the income account as an item addible to railway operating revenues, for the period. If the income account were adjusted to the extent indicated, and if the items then contained therein were taken at their recorded amounts, the debit balance transferable to profit and loss would be decreased by $20,000, or to $238,021.10.

For the period from February, 1914, to date of valuation, the aggregate railway operating expenses have been 106.42 per cent of the railway operating revenues. The ratios and the net railway operating income or deficit for the period February to June 30, 1914, for the years ended June 30, 1915 and 1916, for the six months ended December 31, 1916, for the years ended December 31, 1917 to 1919, inclusive, and for the six months ending on date of valuation, are given in the table below.

Period	Ratio	Income	Period	Ratio	Income
Year 1914 [1]	63. 2	$ 3, 654. 34	Year 1917	119. 0	[3] $29, 055. 33
Year 1915	69. 0	12, 830. 46	Year 1918	102. 4	[3] 6, 706. 48
Year 1916	86. 3	3, 416. 56	Year 1919	111. 2	[3] 28, 708. 53
Year 1916 [2]	97. 7	[3] 6, 093. 89	Year 1920 [2]	148. 7	[3] 53, 024. 96

[1] Five months. [2] Six months. [3] Deficit.

Profit and loss statement.—A condensed summary of the profit and loss account for the period February, 1914, to date of valuation follows.

Credits:		
Profit on road and equipment sold		$5, 633. 69
Donations		20, 410. 50
Miscellaneous credits—		
Insurance received on equipment destroyed by fire in previous year	$30, 279. 37	
Miscellaneous credits	1, 822. 23	
		32, 101. 60
Total		58, 145. 79
Debits:		
Net debit balance transferred from income		258, 021. 10
Surplus appropriated for investment in physical property		410. 50
Loss on retired road and equipment		13. 57
Miscellaneous debits		2, 176. 39
Total		260, 621. 56
Debit balance as of date of valuation		202, 475. 77

Dividends.—The Electric Short Line Railway has not declared any dividends on its capital stock to date of valuation.

INVESTMENT IN ROAD AND EQUIPMENT

The investment of the Electric Short Line Railway in road and equipment, including land, on date of valuation, is stated in its books as $2,217,911.26, of which the following is a general analysis:

For road constructed and under construction, equipment, right of way, and leasehold purchased from the Electric Short Line Railroad Company, or the Phoenix Loan & Investment Company as agent for that company:		
Securities issued—		
Common stock, par value	$4,000,000.00	
Preferred stock, par value	3,500,000.00	
	7,500,000.00	
Less part of above securities surrendered by the Electric Short Line Railroad Company as consideration for the exclusive right to locate all stations and to acquire land for townsites along the right of way of the Electric Short Line Railway between Minneapolis and Clara City, Minn.—		
Common stock, par value	3,600,000.00	
Preferred stock, par value	3,261,500.00	
	6,861,500.00	
		$638,500.00
For construction and additions and betterments:		
Nonnegotiable debt to affiliated companies, being credits given in open account to the Phoenix Loan & Investment Company or to J. E. Luce, including charges of $24,490.11 for interest	175,702.13	
Open account indebtedness, being credits given H. F. Balch, contractor, in open account for which details were not obtained	102,996.73	
Items for which a detail by classes of outlays was not obtained	1,399,079.96	
		1,677,778.82
For commissions paid and other outlays in connection with sales of preferred stock		267,360.07
Total of above items		2,583,638.89
Less retirements and other credits:		
Road and equipment sold or retired, credited at	$96,665.36	
Amount credited to investment in road and equipment account and concurrently charged to balance sheet account, Discount on Capital Stock for which no details were obtained	305,500.05	
		402,165.41
Net of the above items		2,181,473.48
Other item, not in accordance with the present classification of accounts, charge, transferable to miscellaneous physical property account; outlay for construction west from Hutchinson, incomplete at date of valuation, not inventoried, upon which work has been discontinued		36,437.78
Total recorded as of date of valuation		2,217,911.26

If the "other item" set out in the above general analysis were eliminated and if all the items then contained therein were taken at their recorded values, the balance in the investment in road and equipment account would be reduced by $36,437.78, or to $2,181,473.48. This adjusted amount would be the result, on the one hand, of gross outlays that consist of considerations other than cash recorded at $2,583,638.89, and on the other hand, of items deductible from the gross outlays and recorded at $402,165.41, but not deductible at the recorded amounts from any particular class or classes of such outlays. The cash value at the time of the transactions of the considerations other than cash and of the items deductible from the gross outlays is not known and can not be definitely determined, because it has not been possible to obtain the necessary information. The balance in the account, if adjusted to this extent, so far as it is resolvable into the kinds of considerations, would comprise the following classes of recorded outlay:

Capital stock issued, par value	$638,500.00
Nonnegotiable debt to affiliated companies, including charges of $24,490.11 for interest	175,702.13
Open account transactions with construction contractor	102,996.73
Items for which a detail by classes of outlay was not obtained	1,399,079.96
Commissions paid and other outlays in connection with sales of preferred stock	267,360.07
From which should be deducted whatever portions, not definitely determinable, represent—	
Road and equipment sold or retired, credited at	96,665.36
Amount credited to investment in road and equipment account and concurrently charged to balance sheet account, Discount on Capital Stock, for which no details were obtained	305,500.05

These outlays may include some or all of the undetermined cost of certain lands classified herein as noncarrier lands and some or all of the undetermined portions, assignable to noncarrier lands, of the cost of lands classified herein as partly carrier and partly noncarrier, and some or all of the undetermined costs of structures classified as noncarrier. The Electric Short Line Railway has not charged to its miscellaneous physical property account any amounts that represent these noncarrier lands. The costs of these lands, so far as indicated by accounting records, together with certain amounts reported by the company as costs of such lands, but not supported in the accounts, are stated in the chapter on original cost to date.

ORIGINAL COST TO DATE

The original cost to date of the road and equipment, including land, owned by the Electric Short Line Railway and used for common-carrier purposes, has not been definitely ascertained. The records of the Electric Short Line Railroad Company, predecessor organization, obtained did not reflect the cost to it of certain road, equipment, right of way, and leasehold purchased from it or from the Phoenix Loan & Investment Company, an affiliated company, as agent for the former company. The data obtained on the outlay for creating and improving the remainder of the road and equipment, including land, are those found in the investment in road and equipment account of the Electric Short Line Railway, summarized as follows:

Nonnegotiable debt to affiliated companies, including charges of $24,490.11 for interest	$175, 702. 13
Open account transactions with construction contractor	102, 996. 73
Items for which a detail by classes of outlay was not obtained	1, 399, 079. 96
Commissions paid and other outlays in connection with sales of preferred stock	267, 360. 07
From which should be deducted whatever portions, not definitely determinable, represent—	
Road and equipment sold or retired, credited at	96, 665. 36
Amount credited to investment in road and equipment account and concurrently charged to balance sheet account, Discount on Capital Stock, for which no details were obtained	305, 500. 05

The cash value at the time of the transactions of the considerations other than cash and of the items deductible from the gross outlays is not known and can not be definitely determined, because it has not been possible to obtain the necessary information. These outlays may include some or all of the undetermined cost of certain lands classified herein as noncarrier lands, and some or all of the undetermined portions, assignable to noncarrier lands, of such cost of lands classified herein as partly carrier and partly noncarrier, and some or all of the undetermined costs of structures classified as noncarrier. The Electric Short Line Railway has not charged to its miscellaneous physical property account any amounts that represent these noncarrier lands. The costs of these lands, so far as indicated by accounting records, together with certain amounts reported by the company as costs of such lands, but not supported in the accounts, are stated in the section of this chapter devoted to cost of lands.

Cost of lands.—The Electric Short Line Railway reports amounts aggregating $194,008.63 as the outlays by itself in connection with lands owned or used by it, including noncarrier lands, and that the proceeds from the sale of parts of parcels of such lands aggregate $1,500. A verification of the amounts indicates that the reported outlays should be reduced by $55,801.72, as detailed below:

Additions, omitted deed considerations	$369. 00
Deductions:	
Reported costs not subject to verification	44, 706. 50
Costs reported for lands not inventoried	11, 429. 22
Nominal deed considerations reported as land cost	35. 00
Total	56, 170. 72
Net total deductions	55, 801. 72

The returns include certain lands for which merely nominal deed considerations are reported, certain streets and highways vacated to the company by municipalities without reported considerations, certain lands for which there is no reference to evidence of title, and a right in private lands for which no cost is reported. The amounts reported as costs incurred for the remaining lands owned, after making the changes noted, are made up in part of costs supported by accounting records and in part of substantial considerations named in deeds, which the company returned as costs, but which are not supported by accounting records. These amounts and the proceeds from parts of parcels sold, both

classified according to the classification herein of the lands to which they apply, are summarized, as follows:

Classification	Costs supported by accounting records	Amounts not supported by accounting records
Lands classified as carrier:		
Owned and used	$97, 804. 16	$34, 065. 75
From which should be deducted the portions, not definitely determinable, assignable to parts of parcels sold for proceeds of	900. 00	600. 00
Lands classified as noncarrier, owned		2, 248. 00
Lands classified as partly carrier and partly noncarrier, owned and used		4, 089. 00

Cost of machinery and equipment.—The Electric Line Railway reports that it owns and uses 228 units of equipment, 4 roadway machines, and certain machinery with costs aggregating $157,171.51. A verification of the returns indicates that the costs should be reduced by $201.50, as detailed below.

	Units	Amount
Additions:		
Steam locomotives, inventoried but not reported	1	
Passenger-train cars, inventoried but not reported	1	
Total	2	
Deductions, work equipment, no service value	2	$201. 50
Net total deductions		201. 50

After making the changes noted and classifying the returns according to the classification herein of the property to which they apply, the revised returns are summarized as follows:

Classification	Units	Costs supported by accounting records	Amounts estimated by the company or otherwise not supported by accounting records
Machinery:			
Roadway machines	4	$6, 358. 23	$551. 59
Shop machinery			4, 327. 79
Total		6, 358. 23	4, 879. 38
Equipment:			
Steam locomotives	3	17, 874. 64	2, 615. 76
Steam locomotives	1		
Freight-train cars	180		47, 886. 69
Passenger-train cars	23	67, 400. 29	4, 981. 56
Passenger-train cars	1		
Work equipment	18	2, 350. 00	1, 384. 76
Miscellaneous equipment	2	383. 85	854. 85
Total	228	88, 008. 78	57, 723. 62

MISCELLANEOUS PHYSICAL PROPERTY

The accounts of the Electric Short Line Railway do not record as such any investment in miscellaneous physical property on date of valuation. However, certain parcels and parts of parcels of land owned by it have been classified herein as noncarrier lands. A summary of the cost of these lands, as reported by the company, is stated in the chapter on original cost to date.

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The investment in road and equipment account of the Electric Short Line Railway includes charges of $36,437.78 in connection with an extension of road described as west from Hutchinson, which was incomplete on date of valuation, not inventoried, and upon which work had been discontinued. If the costs of $36,437.78 were transferred from "other items" in the investment in road and equipment account, the balance in the miscellaneous physical property account would be $36,437.78.

AIDS, GIFTS, GRANTS, AND DONATIONS

The Electric Short Line Railway has made no report of aids, gifts, grants, or donations received by it. However, an examination shows that $410.50 was received by it and credited to profit and loss account as donations. The report of the Electric Short Line Railway upon the cost of its lands shows that certain parcels were acquired through deeds that recite merely nominal considerations. Since the records do not indicate that any actual payment was made in the acquisition of these parcels, they have been herein designated as apparent aids. The value at the time of acquisition of lands received as donations has not been ascertained, because it has not been possible to obtain the necessary information.

MATERIAL AND SUPPLIES

The investment of the Electric Short Line Railway in material and supplies on date of valuation is stated in its books as $23,686.35.

LEASED RAILWAY PROPERTY

The Electric Short Line Railway uses property of others under trackage agreements, not designated as leases, to the extent indicated in the statement below. The description of the property, the period and terms of use and the rentals accrued and charged to income for the year ending on date of valuation are as follows:

Jointly used, but not owned, owned by—	Rentals
The carrier, tracks, 3.06 miles of double-track main line between Luce Line Junction and the terminal depot at Holden and Seventh Streets, Minneapolis, Minn., including the use of the terminal depot, for an indefinite period from Oct. 15, 1919; stipulated payment $2,000 per month; maintenance to Feb. 28, 1920, paid by user, thereafter by owner	$24, 000
T. B. Walker, freight depot building at Minneapolis, Minn.	1, 200

GENERAL BALANCE SHEET STATEMENT

The general balance sheet statement of the Electric Short Line Railway as of date of valuation is as follows:

ASSETS

Investments, investment in road and equipment		$2, 217, 911. 26
Current assets:		
Cash		3, 612. 78
Loans and bills receivable		37, 725. 55
Traffic and car-service balances receivable		9, 181. 97
Net balance receivable from agents and conductors		4, 306. 51
Miscellaneous accounts receivable		10, 773. 10
Material and supplies		23, 686. 35
Total		89, 286. 26
Unadjusted debits:		
Discount on capital stock		$1, 385, 440. 55
Discount on funded debt		163, 385. 25
Securities issued or assumed, pledged and unpledged	$4, 633, 150. 00	
Total		1, 548, 825. 80
Grand total		3, 856, 023. 32

LIABILITIES

Stock, capital stock:		
Total book liability	7, 500, 000. 00	
Less held by or for this company	4, 593, 150. 00	
		2, 906, 850. 00
Long-term debt, funded debt unmatured:		
Total book liability	840, 000. 00	
Less held by or for the company	40, 000. 00	
		800, 000. 00
Current liabilities:		
Loans and bills payable		29, 422. 80
Traffic and car-service balances payable		8, 091. 20
Audited accounts and wages payable		50, 946. 00
Miscellaneous accounts payable		35, 263. 29
Interest matured unpaid		155, 321. 00
Total		279, 044. 29
Unadjusted credits:		
Tax liability		5, 486. 28
Accrued depreciation, road		26, 886. 00
Accrued depreciation, equipment		11, 618. 10
Other unadjusted credits		28, 203. 97
Total		72, 194. 30
Corporate surplus:		
Additions to property through income and surplus		410. 50
Profit and loss, debit balance		*202, 475. 77*
Total		*202, 065. 27*
Grand total		3, 856, 023. 32

APPENDIX 3

ANALYSIS OF METHODS FOR DETERMINING WORKING CAPITAL

Working capital is understood to include, usually, three parts: First, the investment in a stock of material and supplies; second, the cash necessary to pay the operating expenses incurred for common-carrier service prior to the time when the revenues from that service are available; and, third, a buffer fund of cash constantly on hand to cover amply the recurrent and fluctuating deficiencies in the inflow of revenue applicable to payments falling due.

Considering that the revenues from service performed in any particular period usually lag behind the expenses incurred for the service within that particular period, the amount of cash working capital of this sort needed for operating purposes is the amount by which the matured operating expenses exceed that part of the accrued revenues applicable to operating expenses, which has been collected, has reached the treasury, and has become available for paying bills. It is immaterial whether this fund for working capital is provided by the owners, or secured in part on occasion through bank loans, or in part by impounding that portion of maturing revenues which is applicable as a return on the property.

A practical way to determine the portion of expenses for service in any period that exceeds maturing revenues from such service will be to consider that, of all operating expenses for service in any period, there will be met from maturing revenues from that service a proportion that is equal to the proportion of all accrued revenues from service within the period that reaches the treasury within that period. The remaining proportion of operating expenses will be the measure of the cash working capital actually used to meet expenses in advance of the receipt of revenues applicable thereto.

Consideration was given to the various factors in this relation between the available revenues and the expenses within any period. Also, consideration has been given to the requirements in the way of a stock of material and supplies. The factors affecting cash working capital are as follows: The relative amount of revenue from the various classes of service; the elapsed time from the beginning of such service to the receipt in the treasury of the revenues for the service, including, for prepaid freight, the time for movement of empty cars to the point of loading, the time consumed in loading, and the time the receipts are in transit to the treasury, and, for freight with charges collected at destination, in addition, the time for movement under load, the time consumed in unloading, and the credit period for payment of charges; the relative amount of operating expenses far various purposes; and the elapsed time from the beginning of the accrual of such respective expenses to the time when they must be paid. The factors in most cases represent the experience of all Class I carriers and in a few cases consist of specially assembled data from the experience of territorially scattered carriers that represent over 40 per cent of the operating expenses of all Class I carriers. For material and supplies, consideration has been given to the average book value of the stock carried by all Class I and Class II carriers on June 30 for the years 1914–1916, and to the fact that some part of this stock is held for additions and betterments and new construction and that some part represents more or less obsolete material.

Considering these facts and reducing these data to an equivalent percentage of a year's operating expenses, the result indicates that the average requirement of carriers for operating working capital, including cash advanced to anticipate revenues, cash on hand, and investment in a stock of material and supplies, is about 13.5 per cent of a year's operating expenses.

In determining working capital for individual roads, consideration is given, so far as data obtainable from reports on file with the commission apply, to the difference between the factors applicable to those roads and the average of factors applicable to all roads as a whole, as hereinbefore mentioned. These differences are in respect to the relative amount of revenues from passenger and freight service, and the average haul of freight and the ratio between empty and loaded car movement in their effect upon the elapsed time before the revenues from each class of service are in hand.

Only such cash and material and supplies as are used for common-carrier purposes may be included in the value found for common-carrier property. Since the above method reveals the amount actually so used, the remainder of such assets that may happen to be in hand because of various causes other than those lying in the performance of common-carrier service must be considered for the purpose of valuation as held for purposes other than those of a common carrier.

If the amount of cash and material and supplies held on date of valuation is less than the amount determined by the above method, due to assistance from affiliated companies or to other special circumstances, the carrier's common-carrier property of that kind can not, of course, be greater than the amount actually on hand. In such cases, the value found for working capital is the sum of the cash and the recorded value of the material and supplies on hand.

The material and supplies and cash on hand, on date of valuation, were less than the average amount found by the above method. Accordingly, it is found that the working capital owned and used by the Electric Short Line Railway for common-carrier operations, on date of valuation, is $27,299.

ELECTRIC SHORT LINE TERMINAL CO.

ELECTRIC SHORT LINE TERMINAL CO.

This company was organized as the ELECTRIC SHORT LINE RAILROAD and its early corporate and construction history is described under that section. Some construction details pertaining to this segment of the line appear in the annual reports of the Minnesota Railroad & Warehouse Commission.

The Electric Short Line Railway applied for a clearance law exemption for the bridge over the Great Northern Ry./Minneapolis & St.Louis Ry. at 12th St. N. and Holden St. N. The head and side clearances were less than required. Contracts for construction of the bridge were signed and work begun prior to April 23, 1913, when the law was enacted. Work on the abutments had begun and all steel had been delivered prior to that date.

On 11-28-1914 the MRR&WC licensed the Penn Ave. interlocker, double track, at the Great Northern Ry. crossing. It was mechanical with 20 frames and 14 levers. A reduction to single track was approved 9-19-1938.

The annual report for the year ended 6-30-1915 stated that a Great Northern Ry. connection at the Berwind Coal Co. fuel yard near 2nd Ave. N. and Aldrich Ave. N. had been put in exclusively for deliverying construction material to the Electric Short Line Railway. A connection in a different location had now been requested which was to be granted by the Great Northern Ry.

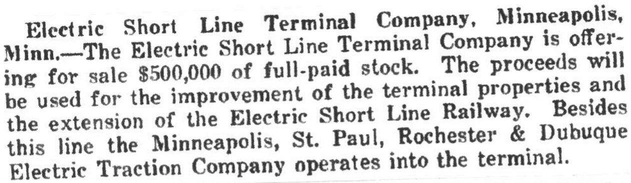
It was on May 6, 1915, that the corporate name was changed to Electric Short Line Terminal Co. On May 29, 1915, trackage rights were granted to the Minneapolis, St.Paul, Rochester & Dubuque Electric Traction Co. over the 3.19 miles of line from Luce Line Junction (Boagen Green) to the Minneapolis terminal.

A terminal building was constructed at 3rd Ave. N. and 7th St. N. during 1916. It was owned 50%/50% by the ESLT Co./MStPR&DET Co.

As of 12-31-1917 the ESLT Co. had 355 stockholders. A majority of the stock was held by: J. E. Luce 13,800 shares; Hazel Luce 3,000 shares; Gluek Brewing Co. 975 shares; and Charles Gluek 480 shares. Other stockholders resided in Minneapolis, Sleepy Eye, Benson and Hutchinson.

On 5-10-1924 the MRR&WC approved construction of a spur track exempted from the clearance law requirements into the Munsingwear Corp. plant on Western Ave. N. The track went under a structure that connected the second stories of that company's buildings.

During the biennial period ended 11-30-1938 MRR&WC reports of clearance problem investigations on Minneapolis trackage provide names of many of the industries located on this trackage. Fruen Milling Co., Gold Seal Warehouse, Ke Hawke Manufacturing Co., Northwest Warehouse of Wyman Partridge Co., Petroleum Service Co., Pennsylvania Oil Co., Phillips spur (east side of and parallel to Colfax Ave. N.), Powers Mercantile Co. spur, L. E. Streator Lumber Co. spur crossing Bassett's Creek, L. E. Streator Lumber Co. at 2nd Ave. N. and Colfax Ave. N., Twin City Milk Co., and Western Oil & Fuel Co.



Electric Short Line Terminal Company, Minneapolis, Minn.—The Electric Short Line Terminal Company is offering for sale $500,000 of full-paid stock. The proceeds will be used for the improvement of the terminal properties and the extension of the Electric Short Line Railway. Besides this line the Minneapolis, St. Paul, Rochester & Dubuque Electric Traction Company operates into the terminal.

ERJ
6-5-15

The Minneapolis, Northfield & Southern Ry. Master List of Contracts contain items pertaining to the ESLT Co. which indicate subsequent events.

August, 1935: Pence Automobile Co. purchase of ESLT Co. stock.
December, 1938: purchase of tracks at 7th St. N.
January, 1940: sale of various spur tracks on the ESLT Co.
December, 1955: deed and bill of sale of all properties of the ESLT Co.
October, 1957: sale of 7th St. N. terminal building.

The Minneapolis, Northfield & Southern Ry. acquired the Electric Short Line Terminal Co. on 12-28-1955 and merged it with the MN&S Ry. 9-4-1956. This included the terminal building and the roadway and track from Minneapolis to Glenwood Junction. Note that the terminal building was sold in 1957.

Refer to the section containing the index to the MN&S Ry. Master List of Contracts for other more detailed items affecting the ESLT Co.

OFFICERS AND DIRECTORS
MRR&WC Annual Reports

Directors

Erle D. Luce	1917-1925	Harry E. Pence, Sr.	1927-1931
J. E. Luce	1917-1925	W. R. Stephens	1927-1931
Severn S. Solverson	1917-1925	F. C. Malcomson	1927-1931
J. H. Ellison	1923-1925	L. E. Jepsen	1927-1931
E. L. Brown	1923-1925	G. Nelson Dayton	1929-1931
E. J. Westlake	1925-1926	Joseph Kunz	1929-1931
Charles Gluek	1923-1931		

Officers

E. D. Luce	president	1917-1926
	treasurer	1917-1922
	general manager	1925-1926
J. E. Luce	vice president	1917-1926
S. S. Solverson	secretary	1917-1926
E. L. Brown	treasurer	1923-1926
E. L. Benner	auditor	1925-1926
Harry E. Pence,Sr.	president	1927-1931
	general manager	1931
W. R. Stephens	vice president	1927-1931
F. C. Malcomson	secretary, treasurer	1927-1931
W. B. Granger	auditor	1927-1931
M. J. Dooley	general manager	1927-1930
Grant L. Martin	general counsel	1927-1931
P. H. Smith	general superintendent	1927-1931
R. C. Smith	general engineer	1927-1930

Officers and directors were not listed in the annual reports after 1931.

M.N. & S. RY.

2. ELECTRIC SHORT LINE TERMINAL CO. TRACKAGE

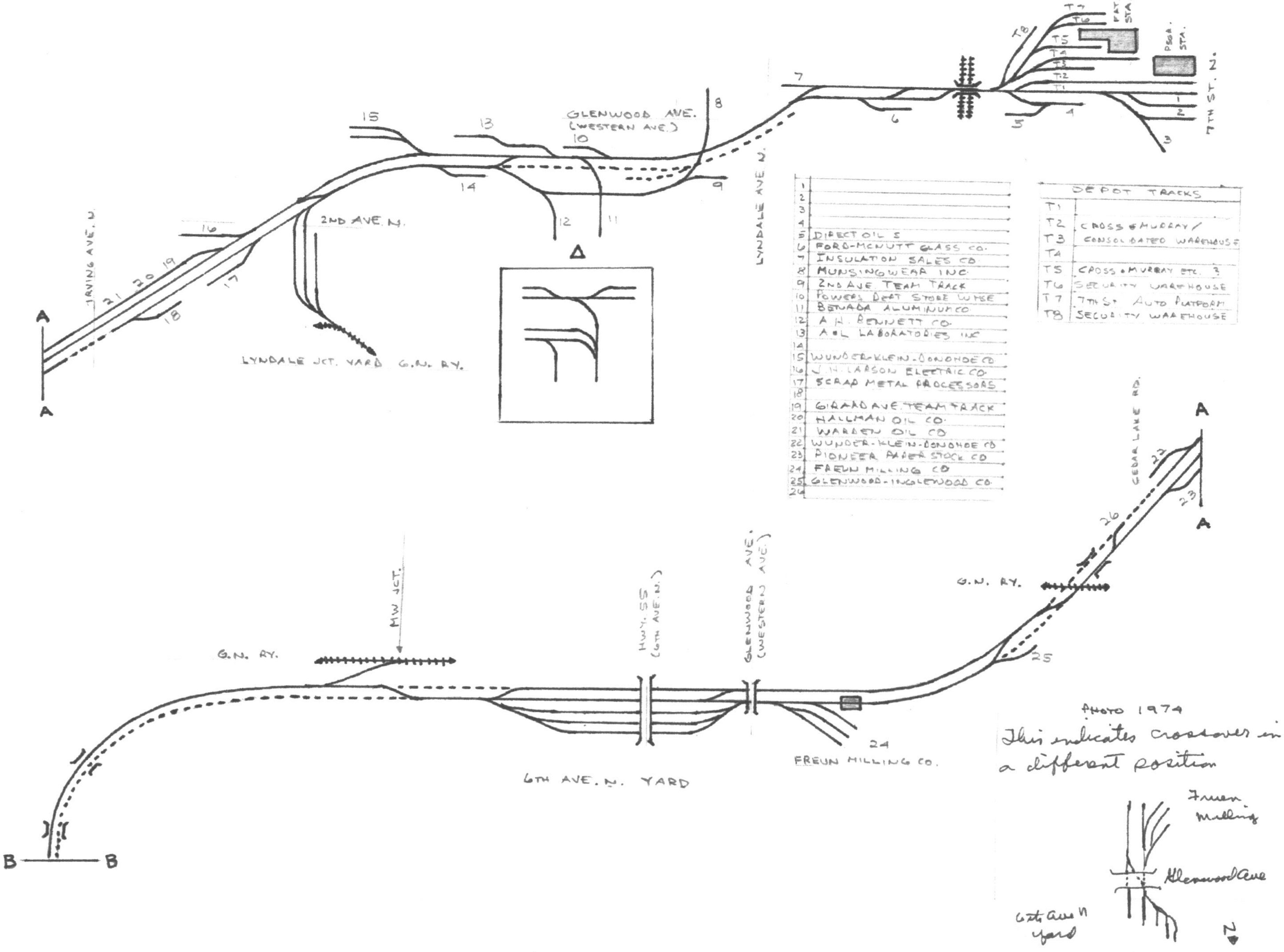

T7
T6
FRT. STA.
T8
T5
T4
T3
T2
T1
PSGR. STA.
7TH ST. N.
1
2
3
4
5
6
7
8
9
GLENWOOD AVE. (WESTERN AVE.)
10
11
12
13
14
15
16
17
18
19
20
21
2ND AVE. N.
IRVING AVE. N.
LYNDALE AVE. N.
LYNDALE JCT. YARD G.N. RY.
A
A
Δ
CEDAR LAKE RD.
22
23
26
G.N. RY.
25
G.N. RY.
MW JCT.
HWY. 55 (6TH AVE. N.)
GLENWOOD AVE. (WESTERN AVE.)
24
FREUN MILLING CO.
6TH AVE. N. YARD
B
B
Freun Milling
Glenwood Ave
6th Ave N Yard
N

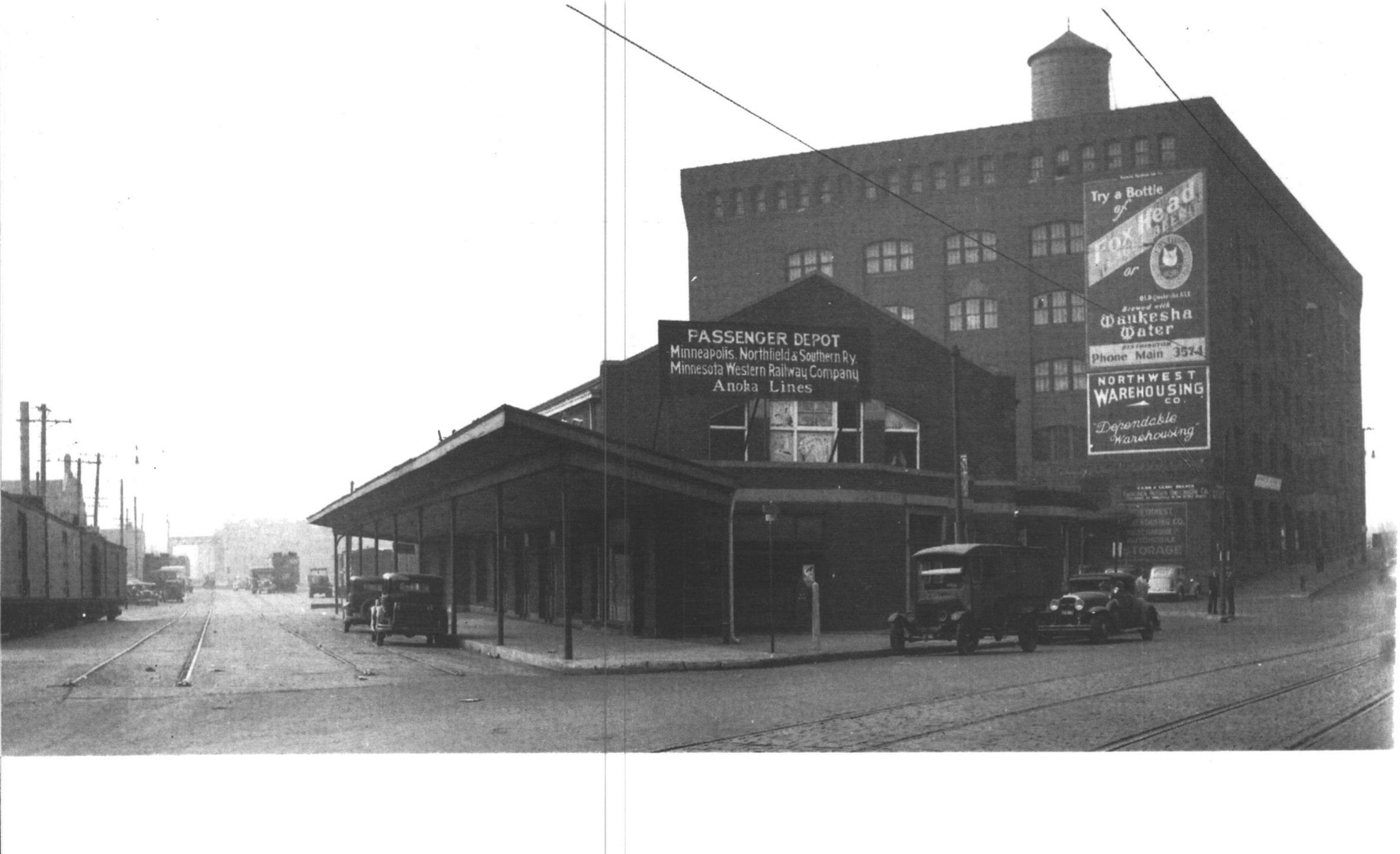
PHOTO 1974

This indicates crossover in a different position

1	
2	
3	
4	
5	DIRECT OIL S
6	FORD-MCNUTT GLASS CO.
7	INSULATION SALES CO
8	MUNSINGWEAR INC.
9	2ND AVE. TEAM TRACK
10	POWERS DEPT STORE WHSE
11	BENADA ALUMINUM CO.
12	A. H. BENNETT CO.
13	A & L LABORATORIES INC
14	
15	WUNDER-KLEIN-DONOHOE CO
16	J. H. LARSON ELECTRIC CO.
17	SCRAP METAL PROCESSORS
18	
19	GIRARD AVE. TEAM TRACK
20	HALLMAN OIL CO.
21	WARDEN OIL CO
22	WUNDER-KLEIN-DONOHOE CO
23	PIONEER PAPER STOCK CO
24	FREUN MILLING CO
25	GLENWOOD-INGLEWOOD CO.
26	

DEPOT TRACKS	
T1	
T2	CROSS & MURRAY / CONSOLIDATED WAREHOUSE
T3	
T4	
T5	CROSS & MURRAY ETC. ?
T6	SECURITY WAREHOUSE
T7	7TH ST. AUTO PLATFORM
T8	SECURITY WAREHOUSE

ELECTRIC SHORT LINE TERMINAL CO.					
TRACK MILEAGE					
I.C.C. VALUATION		1st Main Track	2nd Main Track	Yard Track & Sidings	Total Track
6/30/1920		3.336	3.056	4.159	10.551
MINN. RR & WHSE COMM ANNUAL REPORTS					
Dec 31st			Main Line Track	Yard Track & Sidings	Total Track
1922			6.12	2.71	8.83
1923			6.12	2.83	8.95
1924/1928			6.12	2.95	9.07
1929			6.12	3.04	9.16
1930/1933			6.12	3.2	9.32
1934			7.34	3.77	11.11
1935			7.34	3.73	11.07
1936			6.89	4.08	10.97


PASSENGER DEPOT
Minneapolis, Northfield & Southern Ry.
Minnesota Western Railway Company
Anoka Lines
Try a Bottle of
Fox Head
or
Brewed with
Waukesha Water
Phone Main 3574
NORTHWEST WAREHOUSING CO.
"Dependable Warehousing"
STORAGE

UNION ELECTRIC TERMINAL STATION, MINNEAPOLIS

ET JAN 1916

A joint terminal station is now in course of construction in Minneapolis by the Minneapolis, St. Paul, Rochester & Dubuque Electric Traction Company and the Luce Electric Short Line Company. The station is located in the heart of the business district on a triangular plot bounded by Seventh street, Holden street and Third avenue north.

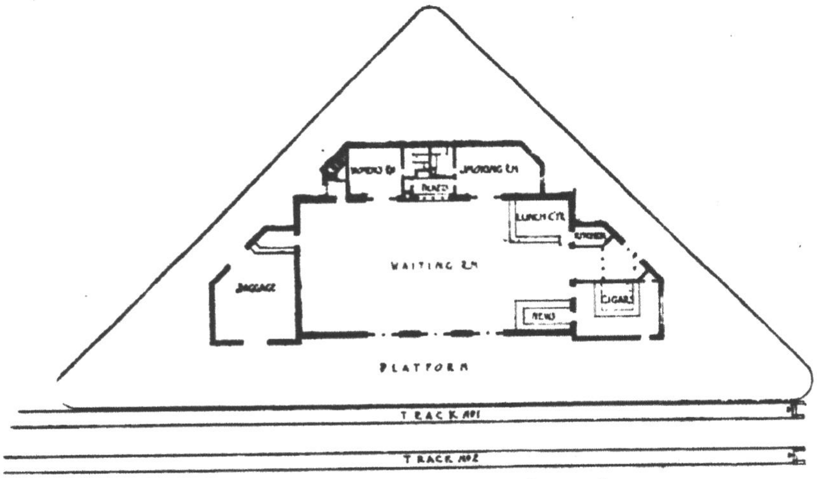
The building is one story high with basement, the superstructure being built of red face brick, trimmed with Indiana lime stone. The station consists of four units: First, the waiting room, which is 86 ft. long, 45 ft. wide and 24 ft. high, with vaulted plastered ceilings; second and third, side wings for baggage and cigar store, respectively, which are 11 ft. high; and fourth, a rear pavilion, which houses the men's and women's waiting rooms, ticket office and toilet rooms. This pavilion is also 11 ft. high. The platform and tracks are on the Holden street side of the building, the former being some 200 ft. long. Over this extends a protecting roof from the building to the tracks.

The building embraces, besides those rooms mentioned, a barber shop at one end of the men's waiting room, check room and service room. The waiting room is well lighted on all sides by eight large plate glass windows, the other rooms being correspondingly well lighted. The accessories of the building include telephone booths, drinking fountain, vault, etc.

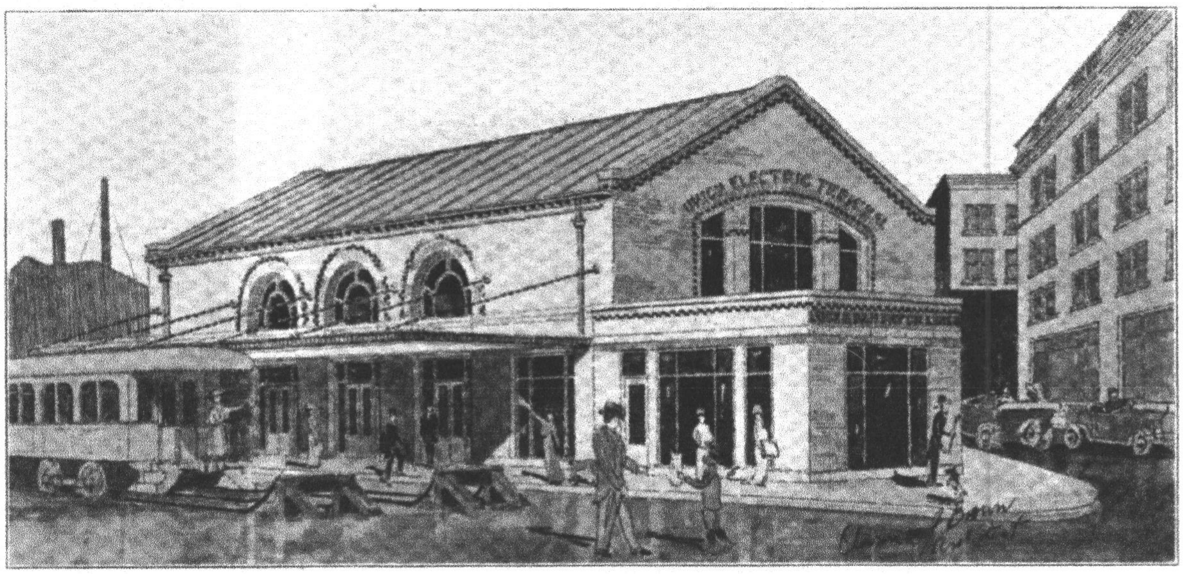
With the exception of the floor in the cigar store, which is terrazzo, the floors throughout will be granolithic. The waiting room will have a red Spanish tile roof and ornamental cornice. The ticket office contains space for four ticket sellers with the usual accessories.

The mechanical equipment includes modern steam heating plant with down-draft boiler, hot and cold running water and drainage system.

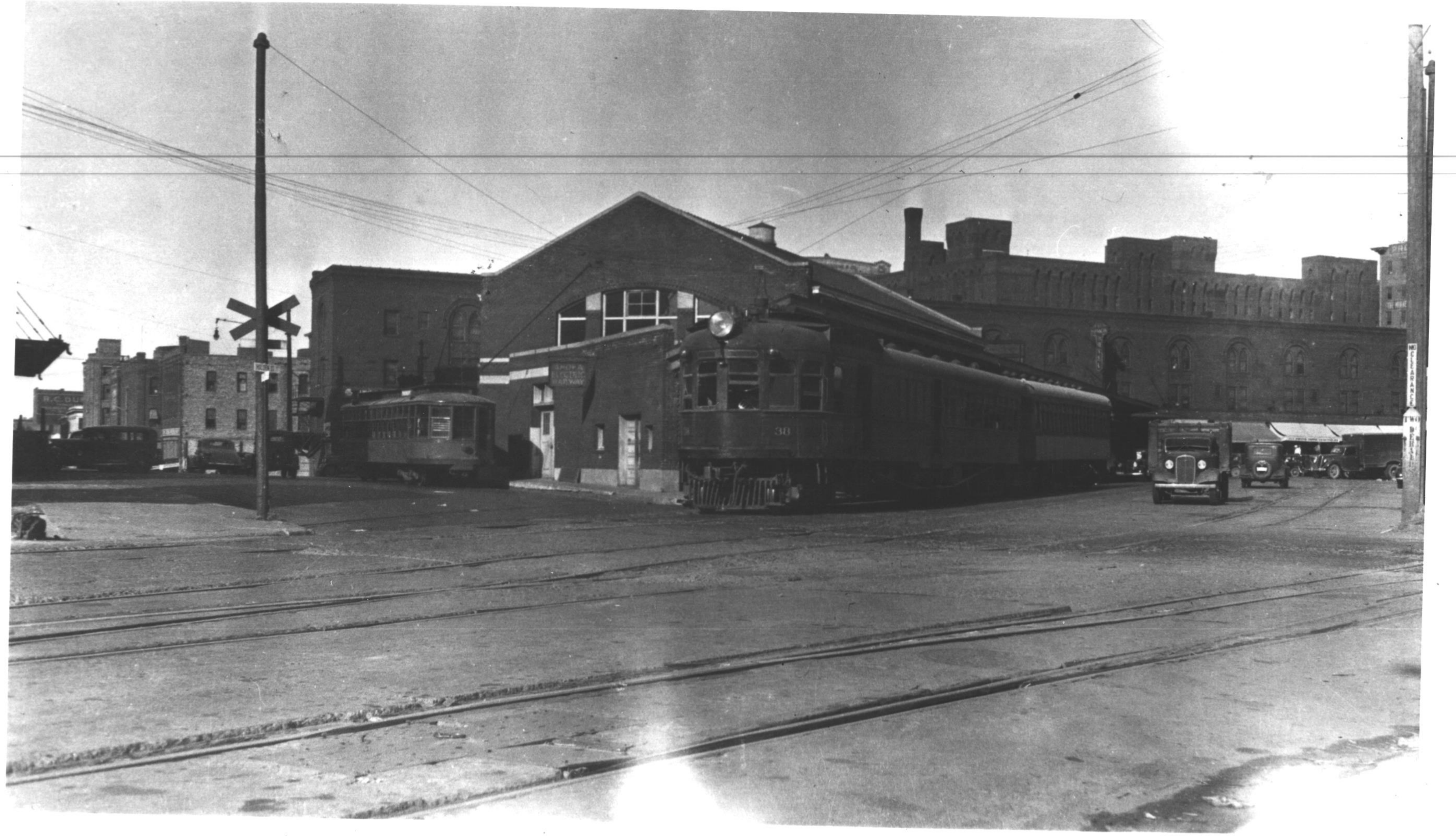
Clarence J. Brown, of Minneapolis, was the architect for this station, which will cost, when completed, $16,000.

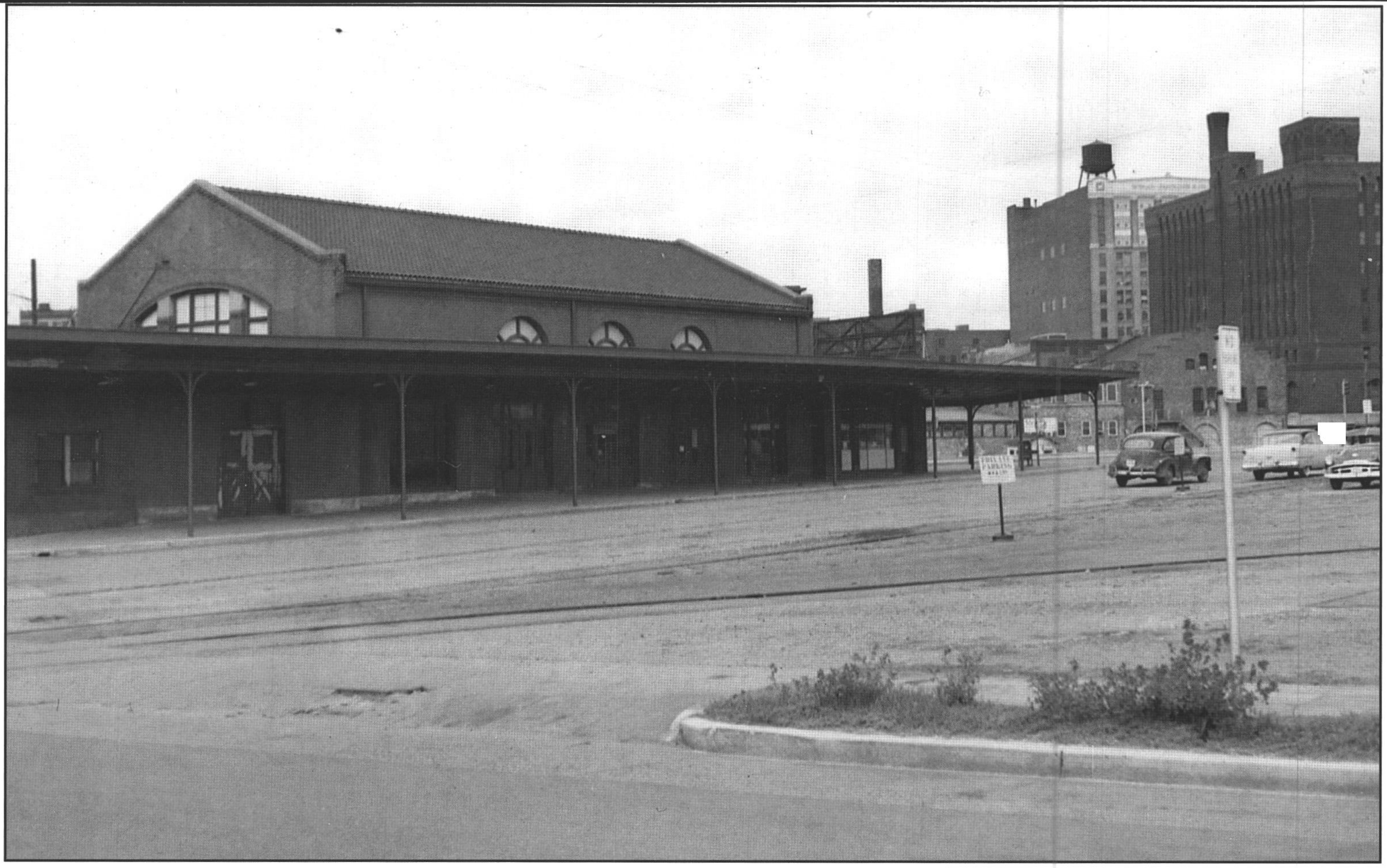


Plan of Joint Terminal Station in Minneapolis

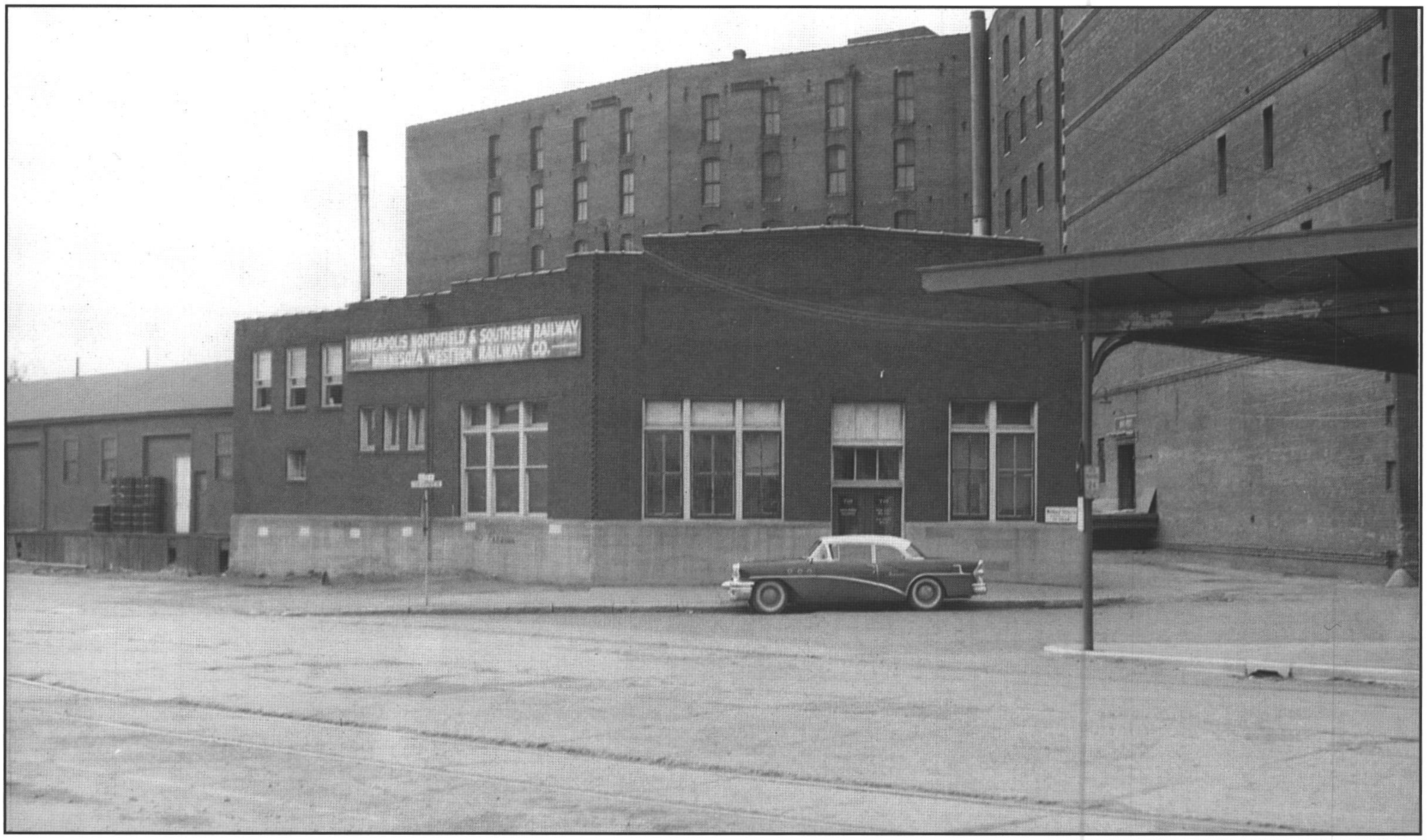


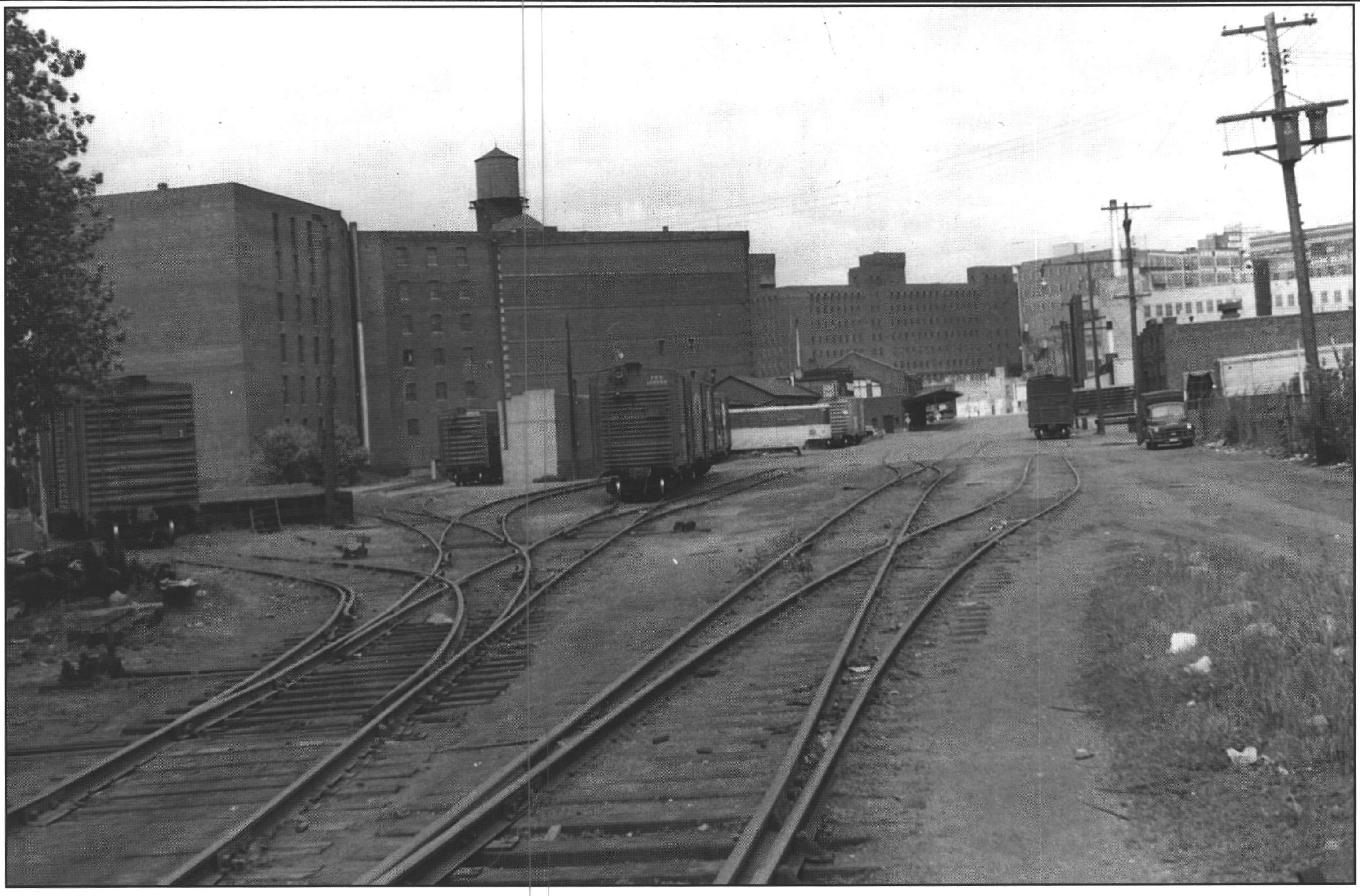
Joint Terminal Station Now Being Built in Minneapolis


ELECTRIC
RAILWAY
38
CLEARANCE

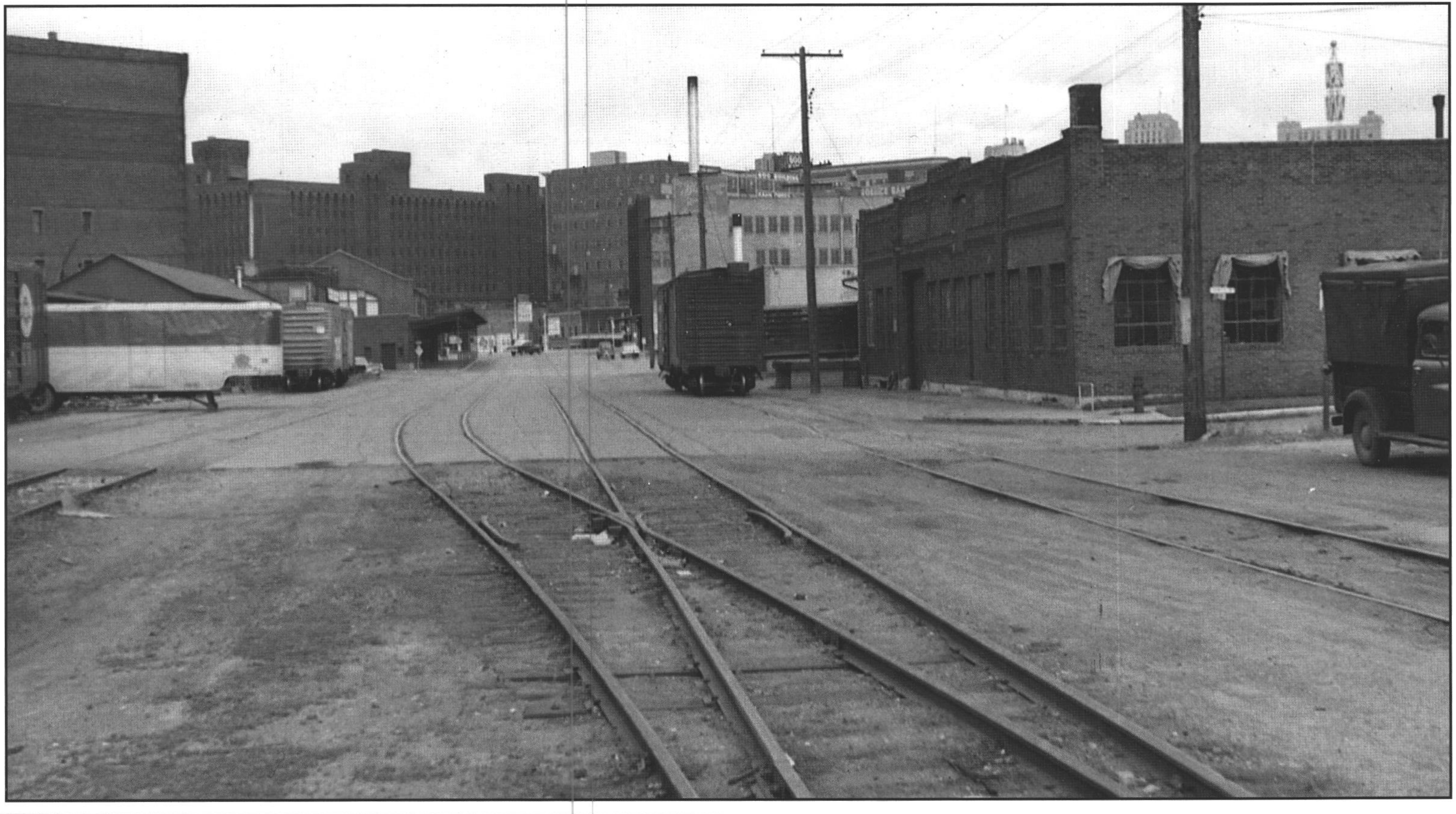


Passengers loaded under this canopy. The bottom photo shows the headhouse of the freight house.


MINNEAPOLIS NORTHFIELD & SOUTHERN RAILWAY
MINNESOTA WESTERN RAILWAY CO.



The track was laid in the middle of Holden Street and saw plenty of freight business. Note the Butler Building in the distance. The boxcar at left in the bottom photo is spotted at the freight house, which was separate from the passenger depot.



Valuation Docket No. 999 [1]

ELECTRIC SHORT LINE TERMINAL COMPANY

Submitted July 27, 1927. Decided December 30, 1927

1. Final value for rate-making purposes of the property of the Electric Short Line Terminal Company, owned and used for common-carrier purposes, found to be $935,000, as of June 30, 1920.
2. Final value for rate-making purposes of the property of the Electric Short Line Railway Company, owned and used for common-carrier purposes, found to be $1,502,299, as of June 30, 1920.

E. D. Luce for Electric Short Line Railway Company and Electric Short Line Terminal Company.

D. F. Jurgensen and *Eugene W. Reed* for Minnesota Railroad & Warehouse Commission.

Eugene W. Reed for the National Association of Railroad & Utilities Commissioners.

Report of the Commission

Division 1, Commissioners Meyer, Aitchison, and Lewis

By Division 1:

Tentative valuations as of June 30, 1920, of the properties of the Electric Short Line Terminal Company and the Electric Short Line Railway Company, were completed and notices thereof were given to the carriers and other interested parties on May 6, 1927, and May 4, 1927, respectively. The Electric Short Line Terminal Company will be hereinafter called the carrier. The carrier and the Electric Short Line Railway Company filed protests within the respective statutory periods. The Minnesota Railroad & Warehouse Commission filed a protest in each proceeding. A joint hearing has been had on the issues presented by the protests.

On valuation date the carrier owned and operated a standard-gauge, steam-operated, terminal railroad in Minneapolis, Minn. Its road embraced 10.551 miles of all tracks, of which 3.336 miles were main line. The main line was double tracked for 3.056 miles. The Electric Short Line Railway owned and operated a single-track, standard-gauge, steam railroad, extending from Luce Line Junction to Hutchinson, both in Minnesota, 55.133 miles. It also owned 7.931 miles of yard tracks and sidings and had trackage rights over the double-track road of the carrier between Luce Line Junction and the terminal depot of the carrier, 3.06 miles.

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[1] This report also includes Valuation Docket No. 998, Electric Short Line Railway Company.

PROTESTS

The protests of the carrier and of the Electric Short Line Railway were, in part, of a general nature containing objections to the rules, methods, and principles employed by us in the preparation of the tentative valuations. In previously decided valuation cases we have considered and disposed of similar objections. It will be unnecessary for us to discuss the specific objections made in either of these protests inasmuch as the carrier and the Electric Short Line Railway acquiesced at the hearing in our report of facts and in our finding of value. In its protests the Minnesota commission objects to our findings of the present value of lands in the tentative valuations of the carrier and of the Electric Short Line Railway and to our failure to ascertain and report separately other elements of value and the original cost to date of the lands and of the properties as a whole. Such of its objections as were made the subject of testimony at the hearing will be hereinafter considered and determined.

ORIGINAL COST

The witness for the Minnesota commission testified in support of the objection against our failure to find the original cost to date of the properties of either the carrier or the Electric Short Line Railway, and presented as evidence of such cost exhibits compiled from the certificates which these carriers filed with the Minnesota commission under the statutes of that State. The information contained in the cost certificates filed by the carrier was used by us in the preparation of the tentative valuation. We there stated that the carrier was organized in 1908, and no accounting records were available for the period from date of organization to June, 1915. It was during this period that much of the carrier's property was acquired, or constructed for its account, by an affiliated company. We stated also that the opening entry of December 31, 1917, in the carrier's investment account, which was the same as the amount shown in the cost certificate, includes the estimated value of the property which it thus acquired through its affiliated company. Similarly, in our tentative valuation of the Electric Short Line Railway we pointed out the infirmities in the available data showing its original cost to date, which precluded our accepting those data as a reliable statement of that cost. The witness for the Minnesota commission has presented no additional data showing original cost. The record does not support a finding of original cost to date either of the lands of these carriers, or of their property as a whole, and we find no occasion for modifying our summary of the available data showing these costs.

COST OF REPRODUCTION

The witness for the Minnesota commission presented evidence concerning the cost of reproduction of the carrier's property, but conceded that, measured by his data, the costs of reproduction as set forth in the tentative valuation are substantially correct. He also presented evidence and testimony in support of his contention that our estimates of the cost of reproduction new and cost of reproduction less depreciation of the road and equipment accounts of the Electric Short Line Railway are excessive by not less than $157,856 and $144,265, respectively. The method used by the witness for ascertaining the cost of reproduction new was to apply separately to the amounts reported to the Minnesota commission as the cost of the property and the annual additions and betterments, factors determined from the all-commodity index numbers of the United States Department of Labor. The factor to be applied for each year was found by comparing the index number for that year with the 1914 number.

The witness excluded from his comparison all amounts which the Electric Short Line Railway had reported to the Minnesota commission as the costs of general expenditures, aggregating more than $500,000. If he had applied to the total amounts shown in the cost certificates the same factors which he applied to the reported costs for road and equipment, and had thus made his comparison on the basis of total cost of reproduction, he would have found that the reported cost of construction thus "converted to a 1914 cost basis" exceeded our estimates of cost of reproduction, and by sums greater than those by which he contends the costs of reproduction reported by us are excessive. In other valuation cases where data from these cost certificates have been before us we have indicated the need of careful analysis to determine whether all costs incurred for work prior to the date our present classification of accounts became effective, were distributed to the proper account under the present schedule. Some of the data which the witness included in his study pertain to this earlier period, but there is no evidence that any investigation was made to determine whether the costs selected for his comparison include all costs incurred for the construction, none being included in the general expenditures which he excluded. He presented no evidence that either the quantities inventoried by us or the unit prices applied thereto are in error. In our opinion, the comparison made does not justify any modification of our tentative valuation. The protest has not been sustained.

LAND

We have reported that the carrier owns and uses for common-carrier purposes 49.48 acres of lands, with a present value of $683,819. The Minnesota commission protests that this amount is excessive by not less than $429,000. At the hearing its witness testified that in his opinion the present value of the carrier's lands as of date of valuation is $320,000, and submitted for the record cost and assessment data for 66 parcels of its lands embracing 50.97 acres. The difference of 1.49 acres in the total area of carrier lands is not explained in the record. In reaching his conclusion as to present value the witness took the gross cost of $332,644.98 shown in the carrier's original-cost certificate as the cost of right-of-way lands and deducted therefrom amounts included for interest and taxes paid on lands, and $72,847.98 stated by the witness to have been paid for lands owned but not used for common-carrier purposes. The remainder, $187,193.06, was then adjusted by eliminating costs of improvements to obtain the cost of the naked land, which cost was trended in the ratio the land assessments as of the time the lands were acquired bore to the assessments as of the year of valuation. He made no attempt to obtain data on sales, as of valuation date, of nearby lands similar to the carrier's right of way.

The carrier's president testified that with the purpose of concealing its intentions of building a terminal railroad in Minneapolis, much of the carrier's right of way was acquired by an affiliated company several years prior to actual construction, that a great deal of this land was purchased long before the deeds were recorded and the amounts shown in many of the deeds greatly understated the value of the land, and that the aggregate cost of $332,644.98 shown in the cost certificate was for carrier land only. He submitted for the record an appraisal which three Minneapolis real-estate men made of these lands, and in which they found the value, as of date of valuation, of the carrier lands to be $888,736.10, and of the noncarrier lands, $528,605.29. The methods by which those real-estate men reached their conclusions are not of record. We are therefore unable to analyze their appraisal.

Our appraisal of the carrier's lands is based upon consideration of the value, as of date of valuation, of similar adjacent and adjoining lands. We are satisfied that this produces more reliable results than does the application of assessment trends to original cost data, as proposed by the Minnesota witness.

For reasons similar to those indicated in our discussion of the contention of the witness for the Minnesota commission regarding carrier lands, his contention that the reported present value of noncarrier lands is excessive, is not sustained. No evidence was offered in support of the protest of the Minnesota commission regarding the present value of lands of the Electric Short Line Railway Company. The tentative valuations in this respect are approved.

Office DEPOT.

FINAL VALUE

The carrier's investment in road and equipment, including land, on the date of valuation is stated in its books to be $1,012,914.74, of which $11,921.83 represents recorded money outlay, and $1,000,992.91 its estimate of the value of carrier property acquired principally through the issuance of capital stock. The original cost to date of the property of the carrier, as a whole, or of its lands, can not be definitely ascertained in the absence of necessary records. The cost of reproduction new of the property owned by the carrier, other than land, and used by it for common-carrier purposes, including its portions of jointly owned minor facilities, is $295,875, and the cost of reproduction less depreciation, $242,391. The present value of lands owned and used for common-carrier purposes, including the carrier's portion of jointly owned land, is $683,819.

The investment of the Electric Short Line Railway in road and equipment, including land, on date of valuation is stated in its books as $2,217,911.26. If adjusted to conform with our present classification of accounts, the amount stated would be reduced to $2,181,473.48, all of which represents considerations other than money and may include some or all of the cost of the noncarrier lands and structures owned. The necessary records are not available from which the original cost to date of the common-carrier property of the Electric Short Line Railway could be ascertained. The present value of the 777.81 acres of lands owned and used for common-carrier purposes is found to be $253,336. The cost of reproduction new and the cost of reproduction less depreciation of all common-carrier property other than land and material and supplies, owned and used by the Electric Short Line Railway, are $1,353,748 and $1,150,249, respectively.

The estimates of cost of reproduction covered by this report are based upon the 1914 level of prices, while the present values of the common-carrier lands covered by the report are based upon the fair average of the normal market value of lands adjoining and adjacent to the rights of way, yards, and terminals of the carrier, as of valuation date. This discrepancy will be removed when we adjust to later dates, in accordance with the requirements of the valuation act, the final values herein reported.

We find that the value for rate-making purposes of the property of the carrier, owned and used for purposes of a common carrier, is $935,000, and of the Electric Short Line Railway, $1,502,299. There is included in the latter value a sum of $27,299 for working capital.

An order will be entered in accordance with our findings.

ORDER

Entered December 30, 1927

These cases having been duly heard and submitted by the parties, and full investigation of the matters and things involved having been had, and said division having, on the date hereof, made and filed a report containing its conclusions thereon, which report is hereby referred to and made a part hereof:

It is ordered, That the following be and they are hereby declared to be, the final valuations of the properties of the Electric Short Line Terminal Company and the Electric Short Line Railway Company, as of June 30, 1920:

VALUATION DOCKET NO. 999, ELECTRIC SHORT LINE TERMINAL COMPANY

Location and general description of property.—The railroad of the Electric Short Line Terminal Company, herein called the carrier, is a standard-gauge, steam-operated, terminal railroad, located in Minnesota. The main line extends southeasterly from Luce Line Junction to Seventh Street and Second Avenue North, Minneapolis, 3.336 miles, of which 3.056 miles is double track. The carrier also owns 4.159 miles of yard tracks and sidings. Its road thus embraces 10.551 miles of all tracks owned and used. The property comprises a connecting track and terminal facilities and is used jointly under trackage-rights agreements by the Electric Short Line Railway and the Minneapolis, Northfield and Southern Railway. The carrier maintains its property for the benefit of the two other carriers, but does not operate any trains.

Capital stock and long-term debt.—The carrier has outstanding, on date of valuation, $2,500,000 par value of common stock. It has no long-term debt outstanding.

Results of corporate operations.—There is given in the leased railway property chapter of Appendix 2 a statement showing the bases and amounts of rental received by the carrier from the two railroads which have joint use of its property. The rental received has been insufficient to meet the maintenance, taxes, interest, and other fixed charges. No dividends have been declared, but payments of 6 per cent per annum are made to certain stockholders. Further information will be found in Appendix 2.

Original cost to date.—The original cost to date of the common-carrier property of the carrier can not be ascertained, as the necessary records are not obtainable. Such information respecting actual expenditures as can be ascertained is stated in Appendix 2.

Investment in road and equipment.—The investment of the carrier in road, including land, no equipment being owned, on date of valuation, is stated in its books as $1,012,914.74. This balance comprises amounts transferred from the miscellaneous physical property account, of which $11,921.83 represents recorded money outlay and the remaining $1,000,992.91 represents the carrier's estimate of the value of railroad property which was acquired with certain noncarrier property, principally through the issuance of capital stock. The estimate is not supported by accounting records. Further information will be found in Appendix 2.

Cost of reproduction new and cost of reproduction less depreciation.—The cost of reproduction new and cost of reproduction less depreciation of all common-carrier property, other than land, owned and used by the carrier, including its portions of jointly owned minor facilities, are $295,875 and $242,391, respectively. These amounts, classified in conformity with the classification of expenditures for road and equipment as prescribed by us, are shown in a summary sheet in Appendix 1.

Cost of lands, rights of way, and terminals at the time of dedication to public use, and their present value.—The carrier owns and uses for common-carrier purposes 49.48 acres of lands. The total original cost of these lands can not be ascertained, as the necessary records are not obtainable, but data thereon will be found in Appendix 2. Their present value, including the carrier's portion of jointly owned land, is $683,819.

Property held for purposes other than those of a common carrier.—The carrier owns and holds for noncarrier purposes 29.30 acres of lands. The total original cost of these lands can not be ascertained, as the necessary records are not obtainable, but data thereon will be found in Appendix 2. Their present value, including improvements thereon owned by the carrier, is $584,734.

The investment of the carrier in miscellaneous physical property, on date of valuation, is stated in its books as $1,482,912.58. This balance consists principally of capital stock issued for railroad and noncarrier property, less amounts transferred to the investment in road and equipment account to represent the carrier's estimate of the value of the railroad property. Further information will be found in Appendix 2.

Aids, gifts, grants of rights of way, and donations.—The carrier has recorded the receipt of a donation of $600 in connection with the construction of a side track.

Material and supplies.—The books of the carrier do not show any material and supplies on hand on date of valuation.

Final value.—After careful consideration of all facts herein contained, including appreciation, depreciation, going-concern value, and all other matters which appear to have a bearing upon the value here reported, the value, for rate-making purposes, of the property of the carrier, owned or used, devoted by it to common-carrier purposes, is found to be $935,000. The records do not show that there was any cash or material and supplies on hand on date of valuation. Accordingly, no working capital is found to be owned or used by the carrier. No other values or elements of value to which specific sums can now be ascribed are found to exist.

Appendixes.—Attached hereto and made a part hereof are Appendixes 1 and 2. Appendix 1 gives the explanatory text and summary sheet showing the classification of the cost of reproduction new and cost of reproduction less depreciation, above set forth, in conformity with the classification of expenditures for road and equipment prescribed by us. Appendix 2 shows in detail the history and organization of the carrier; moneys and other considerations received by reason of issues of stocks, bonds, and other securities, together with the syndicating, banking, and other financial arrangements attending their issue; the net and gross earnings; the development of fixed physical property; investment in road and equipment; the cost of lands, rights of way, and terminals; the general balance sheet statement and other pertinent information.

Reference is made to Appendix 3, *Texas Midland Railroad*, 75 I. C. C. 1, 108, which is hereby made a part hereof, for a statement of the methods employed and of the reasons for the differences between the various cost values reported.

The accounting, engineering, and land reports, copies of which have been furnished to interested parties and the State officials of the State in which the carrier is situated, give the details respecting the figures here reported, and are on file in the Bureau of Valuation of the commission, open to public inspection, and subject to the direction of Congress. These reports are referred to for greater particularity as to the matters herein stated.

APPENDIX 1

Traffic connections.—The carrier has connections with the roads of the Electric Short Line Railway and the Minneapolis, Northfield and Southern Railway at Luce Line Junction, Minn., and with the roads of the Chicago, Burlington & Quincy Railroad Company and the Great Northern Railway Company at Minneapolis, Minn.

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Physical conditions affecting construction.—The railroad lies almost entirely within the city limits of Minneapolis. The line follows Bassett's Creek where the land is level and marshy. The soil is sandy clay.

Economic conditions relating to traffic.—The property is operated as a joint facility, providing trackage and station terminals for the Electric Short Line Railway and the Minneapolis, Northfield and Southern Railway.

Physical characteristics of road.—The grading is comparatively heavy, averaging about 25,000 cubic yards per mile, and is all common material. The most important metal bridge is the double-track crossing of Holden Avenue, Minneapolis. This structure is 207 feet in length and consists of one 135-foot through-truss and one 72-foot through-plate girder span on one concrete abutment, one steel bent, and four concrete pedestals. Trestle bridges are used to effect crossings over marshes and Bassett's Creek. The crossties in the main tracks average about 2,600 to the mile and are untreated tamarack and cedar. The main tracks are laid with new 80-pound rail. The tracks are ballasted with gravel. The most dangerous grade crossings in Minneapolis have been eliminated by the construction of overgrade crossings. The combination brick depot and office building in Minneapolis is jointly owned with the Minneapolis, Northfield and Southern Railway.

Equipment.—The carrier owns no equipment. The equipment used in the operation of the road is furnished by proprietor companies.

Engineering and general expenditures.—Engineering has been estimated at 4 per cent on road accounts 3 to 47. General expenditures, exclusive of interest, have been estimated at 1.5 per cent on road accounts 1 to 47, exclusive of account 2. Interest during construction has been estimated for one-half the construction period of 10 months, plus 3 months, at 6 per cent per annum on all road and general-expenditures accounts, except accounts 2 and 76.

SUMMARY

Owned and used, including carrier's portion of jointly owned minor facilities

Account	Classes	Cost of reproduction new	Cost of reproduction less depreciation
	I. ROAD		
1	Engineering	$10,780	$10,780
3	Grading	29,245	29,245
6	Bridges, trestles, and culverts	56,671	44,168
8	Ties	22,236	11,119
9	Rails	35,163	32,587
10	Other track material	11,651	8,065
11	Ballast	19,318	14,488
12	Tracklaying and surfacing	29,031	21,773
13	Right-of-way fences	35	18
15	Crossings and signs	40,352	36,638
16	Station and office buildings	15,480	12,191
17	Roadway buildings	204	173
27	Signals and interlockers	8,385	7,282
36	Paving	1,580	1,005
38	Roadway small tools	160	80
	Total, 1, and 3 to 47, inclusive	280,291	229,612
	III. GENERAL EXPENDITURES		
71	Organization expenses		
72	General officers and clerks	4,204	3,447
73	Law		
74	Stationery and printing		
75	Taxes		
77	Other expenditures, general		
76	Interest during construction	11,380	9,332
	Total, 71 to 77, inclusive	15,584	12,779
	Grand total, 1, and 3 to 77, inclusive	295,875	242,391

APPENDIX 2

INTRODUCTORY

The carrier is a corporation of the State of Minnesota, having its principal office at Minneapolis, Minn. While the present name of this company is that given above, it was incorporated originally as the Electric Short Line Railroad Company, which name was later changed. There are no available accounting records for the period from the date of organization to June, 1915. For that reason only partial information can be given from the accounts in connection with its financial dealings, corporate operations, or investments. Certain information indicated hereinafter, pertaining to the period first mentioned, has been taken from sources other than the accounting records of the company.

The records reviewed do not indicate that the carrier is controlled by any individual or corporation on June 30, 1920, the date of valuation. However, 46 per cent of its capital stock is held by J. E. Luce of Minneapolis, Minn. On the other hand, the carrier does not control any common-carrier corporation. The property of the carrier has been operated by its own organization since June, 1915, for the benefit of the Electric Short Line Railway and the Minneapolis, Northfield and Southern Railway and its predecessors, the Minneapolis, St. Paul, Rochester and Dubuque Electric Traction Company. The records reviewed do not indicate by whom it was operated prior to that date.

CORPORATE HISTORY

The carrier was incorporated August 7, 1908, under the general laws of the State of Minnesota as the Electric Short Line Railroad Company, for the purpose of conducting transportation business. The name was changed May 6, 1915. The date of organization was August 10, 1908.

DEVELOPMENT OF FIXED PHYSICAL PROPERTY

The available records of the carrier indicate that its owned mileage was acquired in part by construction and in part as a consideration in a trackage agreement. Data obtained from minute records indicate that prior to 1912 the Phoenix Loan & Investment Company, an affiliated corporation controlled by the Luce interests, constructed for account of this company about 8 miles of road and partially constructed 25 miles of road west of Minneapolis, all of which was sold to the Electric Short Line Railway. The records reviewed indicate that the railroad owned on date of valuation, consisting of 3.336 miles of main line and 4.159 miles of yard tracks and sidings, extending from Luce Line Junction to Seventh Street and Second Avenue, North, Minneapolis, Minn., was constructed originally in 1913, as a single-track line by the Phoenix Loan & Investment Company acting as agent for this company and was acquired, together with certain miscellaneous physical property, in consideration for the entire issue of capital stock of the carrier. In 1914, the Minneapolis, St. Paul, Rochester and Dubuque Electric Traction Company, in part consideration for trackage rights into Minneapolis, over tracks of this company, constructed the second main-line track, 3.056 miles, which was completed about July 30, 1915.

HISTORY OF CORPORATE FINANCING

Syndicating, banking, and other financial arrangements.—The records reviewed do not indicate that any syndicating arrangements have been made in connection with issuance of securities. The carrier's minute records and correspondence indicate that the finances of the company were managed from 1908 until 1920, by the Phoenix Loan & Investment Company, whose records are not available.

Capital stock.—The authorized capital stock is $2,500,000 par value, divided into shares of $100 par value each, and classified as common stock. The entire authorized amount was issued to the Phoenix Loan & Investment Company and charged to miscellaneous physical property account in consideration for the terminal property and miscellaneous physical property which that company had acquired for account of this company. The entire issue of $2,500,000 par value is outstanding on the date of valuation.

Short-term notes.—The carrier has issued short-term notes of $31,715 par value to date of valuation, of which $8,950 has been retired, leaving $22,765 outstanding. The considerations recorded as passed in connection with the issuance and retirement, in part, of these notes were as detailed hereunder:

Par value	Consideration	Recorded value
Issued		
$27, 915	Unapportioned part of miscellaneous physical property acquired	$27, 915
3, 800	Undetermined, charged to Phoenix Loan & Investment Company in open account	3, 800
31, 715	Total issued for considerations	31, 715
Reacquired and retired $8, 950	Cash	8, 950
Outstanding $22, 765		

RESULTS OF CORPORATE OPERATIONS

The results of corporate operations, as shown in the income and profit and loss accounts, are given below.

Income statement.—A condensed summary of the income account for the year ending on date of valuation, and for the period June 1, 1915, to date of valuation follows.

	Year	Period
Operating income:		
Railway operating expenses	$40, 313. 79	$42, 863. 66
Railway tax accruals	4, 284. 65	22, 371. 77
Total operating deficit	44, 598. 44	65, 235. 43
Nonoperating income:		
Joint-facility rent income	31, 064. 75	85, 213. 21
Miscellaneous rent income	3, 891. 24	17, 516. 43
Income from unfunded securities and accounts		112. 52
Total	34, 955. 99	102, 842. 16
Gross income		37, 606. 73
Gross deficit	9, 642. 45	
Deductions from gross income:		
Interest on unfunded debt	1, 156. 39	5, 518. 23
Miscellaneous income charges	1, 836. 00	40, 550. 06
Total	2, 992. 39	46, 068. 29
Net deficit	12, 634. 84	8, 461. 56
Disposition of net income, income debit balance transferred to profit and loss	12, 634. 84	8, 461. 56

Profit and loss statement.—A condensed summary of the profit and loss account for the period June 1, 1915, to date of valuation follows.

Credits, donation, account construction of side track		$600. 00
Debits:		
Net debit balance transferred from income	$8, 461. 56	
Miscellaneous debits	14, 555. 68	
		23, 017. 24
Debit balance as of date of valuation		22, 417. 24

Dividends.—The records reviewed do not indicate that the carrier has declared any dividends on its capital stock to date of valuation. However, the Phoenix Loan & Investment Company guaranteed a return of 6 per cent per annum to certain stockholders of the company and the carrier has paid on that account a total of $40,550.06, which it charged to income.

INVESTMENT IN ROAD AND EQUIPMENT

The investment of the carrier in road including land, no equipment being owned, on date of valuation is stated in its books as $1,012,914.74, of which the following is a general analysis:

Opening entry, Dec. 31, 1917, estimated amount purporting to represent the value of railroad property acquired from the Phoenix Loan & Investment Company and additions and betterments, transferred from miscellaneous physical property account:		
Road purchased	$882, 467. 94	
Additions and betterments	116, 393. 16	
Other expenditures, detail not recorded	2, 131. 81	
		$1, 000, 992. 91
Additions and betterments, transferred from miscellaneous physical property account, recorded money outlay, for one-half of passenger station constructed		11, 921. 83
Total recorded as of date of valuation		1, 012, 914. 74

The item of $882,467.94 purporting to represent the value of the railroad property which was constructed for account of the carrier is further detailed in an estimate and certificate of cost filed by the company with the Minnesota commission, as follows:

Right of way	$332, 644. 98
Grading	32, 762. 46
Ties	10, 301. 31
Rails	18, 721. 23
Ballast	1, 800. 00
Other track material	4, 398. 73
Tracklaying and surfacing	11, 808. 61
Bridges, trestles, and culverts	82, 616. 27
Roadway signs	10. 00
Coal station	300. 00
Miscellaneous buildings	2, 500. 00
Cinder pits	200. 00
Interlocking plants	9, 549. 00
Engineering expense and supervision	13, 771. 05
Legal and miscellaneous	9, 549. 84
Abutting damages	61, 316. 72
Office expenses (8 years)	10, 970. 38
Commission and other expenses on sale of stock	55, 125. 46
Eight years' salary, president, vice president, agent, and legal	66, 400. 00
For streets and alleys vacated	81, 610. 00
15 per cent of total overhead charges	76, 111. 90
Total	882, 467. 94

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The item of $116,393.16 recorded as additions and betterments purports to represent expenditures by the Minneapolis, St. Paul, Rochester and Dubuque Electric Traction Company in construction of the second main-line track for the carrier in consideration for trackage rights. No further details were obtained. The above may include some or all of the undetermined costs to the carrier of certain lands classified herein as noncarrier lands and some or all of the undetermined portions assignable to noncarrier lands, of the costs to the carrier of lands classified herein as partly carrier and partly noncarrier. The costs of the above lands at time of dedication to public use, so far as they are indicated by accounting records, together with certain amounts reported by the carrier as the costs of such lands, but not supported in the accounts, are stated in the chapter on original cost to date.

ORIGINAL COST TO DATE

The original cost to date of the road, including land, there being no equipment owned, by the carrier and used for common-carrier purposes has not been definitely ascertained, owing to the lack of construction records for the property acquired through the Phoenix Loan & Investment Company, and for the property acquired from the Minneapolis, St. Paul, Rochester and Dubuque Electric Traction Company. The data obtained on the outlay by the carrier for improving such property are stated in the investment in road and equipment account as $11,921.83 of recorded money outlay for one-half of passenger station constructed.

Cost of lands.—The carrier reports amounts aggregating $354,655.25 as the outlays by itself in connection with lands and rights owned or used by it, including noncarrier lands, and that the proceeds from the sale of parts of parcels of such lands aggregate $1,000. A verification of the amounts indicates that the reported outlays should be reduced by $99,356.60, as detailed below:

Additions, omitted deed consideration	$1,486.16
Deductions:	
Costs reported for lands not inventoried	3,125.00
Reported costs not subject to verification	88,467.76
Cost of improvements	9,250.00
Total	100,842.76
Net total deductions	99,356.60

The returns include certain streets and highways vacated to the company by the city of Minneapolis, Minn., without reported considerations, and certain rights in private lands for which no costs are reported. The amounts reported as costs incurred for the remaining lands owned, after making the changes noted, are made up in part of costs supported by accounting records and in part of substantial considerations named in deeds which the carrier returned as costs, but are not supported by accounting records. These amounts and the proceeds from parts of parcels sold, both classified according to the classification herein of the lands to which they apply, are summarized as follows:

Classification	Costs supported by accounting records	Amounts not supported by accounting records
Lands classified as carrier:		
Owned and used (includes $5,500 supported costs and $2,180 unsupported costs not separable as to lands classified as carrier and lands classified as partly carrier and partly noncarrier)	$106,065.39	$37,674.25
Owned jointly and used jointly		18,750.00
Total	106,065.39	56,424.25
Lands classified as noncarrier:		
Owned	48,379.01	1,215.00
From which should be deducted the portions, not definitely determinable, assignable to parts of parcels sold for proceeds of		1,000.00
Lands classified as partly carrier and partly noncarrier, owned and used (see note under carrier land)	38,000.00	5,215.00

Cost of machinery and equipment.—The carrier reports that it owns no machinery or equipment and none has been inventoried as owned by it.

MISCELLANEOUS PHYSICAL PROPERTY

The investment of the carrier in miscellaneous physical property on date of valuation is stated in its books as $1,482,912.58, of which the following is a general analysis:

Opening entry, May 12, 1915, capital stock issued for terminal railroad and miscellaneous physical property acquired through the Phoenix Loan & Investment Company, par value		$2,500,000.00
For additions and betterments:		
Recorded money outlays—		
For one-half cost of construction of passenger station	$11,921.83	
Miscellaneous	443.80	
Total	12,365.63	
Mortgages paid by and credited the Phoenix Loan & Investment Company in open account	23,040.00	
Short-term notes issued, par value	27,915.00	63,320.63
Total of above items		2,563,320.63
Less—		
Amounts charged to Phoenix Loan & Investment Company in open account—		
Sale of lots	750.00	
Adjustment of book value	66,743.31	
Total	67,493.31	
Amount transferred to investment in road and equipment account purporting to represent the value of terminal railroad property acquired and additions and betterments	1,012,914.74	1,080,408.05
Total recorded as of date of valuation		1,482,912.58

INVESTMENTS IN OTHER COMPANIES

The carrier has no recorded investments in other companies on date of valuation. The records of the Electric Short Line Railway indicate that in its purchase of a portion of the road constructed for its account by the Phoenix Loan & Investment Company it issued to the carrier $4,000,000 par value of common stock and $3,500,000 par value of preferred stock, total $7,500,000 par value. Also that $7,000,000 par value ($3,600,000 common and $3,400,000 preferred) was surrendered to it in consideration for the privilege of locating stations and acquiring land for townsite purposes along its line. The disposition made of the remaining $500,000 par value of the stock by the carrier or the consideration received therefor was not determined.

AIDS, GIFTS, GRANTS, AND DONATIONS

The carrier has made no report of aids, gifts, grants, or donations received by it. However, an examination shows that $600 was received by it and credited to profit and loss account as a donation in connection with the construction of a side track.

LEASED RAILWAY PROPERTY

The entire terminal railroad property of the carrier is used by others under trackage agreements to the extent indicated below. The description of the property, the period and terms of use, and the rentals accrued and credited to income for the year ending on date of valuation are as follows:

	Rentals
Solely owned, jointly used by others, used by—	
Electric Short Line Railway, tracks, 3.06 miles double-track main line and 4.159 miles of yard and side tracks, Minneapolis, Minn., to Luce Line Junction, Minn., agreement dated Oct. 15, 1919; terms indefinite; stipulated payment $2,000 per month; maintenance to Feb. 28, 1920, borne by user, thereafter by owner	$24, 000. 00
Minneapolis, Northfield and Southern Railway, tracks, 3.06 miles double-track main line and 4.159 miles of yard and tracks, Minneapolis, Minn., to Luce Line Junction, Minn., agreement dated Nov. 18, 1918; terms not determined; stipulated payment 75 cents per car or engine; minimum payment $300 per month	7, 064. 75

GENERAL BALANCE SHEET STATEMENT

The general balance sheet statement of the carrier, as of date of valuation, is as follows:

ASSETS

Investments:	
Investment in road and equipment	$1, 012, 914. 74
Miscellaneous physical property	1, 482, 912. 58
Total	2, 495, 827. 32
Current assets, miscellaneous accounts receivable	9, 488. 77
Unadjusted debits, other unadjusted debits	545. 00
Grand total	2, 505, 861. 09

LIABILITIES

Stock, capital stock	$2, 500, 000. 00
Current liabilities:	
Loans and bills payable	22, 765. 00
Miscellaneous accounts payable	5, 275. 18
Total	28, 040. 18
Unadjusted credits, tax liability	238. 15
Corporate surplus, profit and loss, debit balance	22, 417. 24
Grand total	2, 505, 861. 09

VALUATION DOCKET NO. 998, ELECTRIC SHORT LINE RAILWAY COMPANY

Location and general description of property.—The railroad of the Electric Short Line Railway Company, is a single-track, standard-gauge, steam railroad, located in southeastern Minnesota. The main line extends westerly from Luce Line Junction to Hutchinson, 55.133 miles. The Electric Short Line Railway also owns 7.931 miles of yard tracks and sidings. Its road thus embraces 63.064 miles of all tracks owned and used. In addition it has trackage rights over the double-track road of the carrier between Luce Line Junction and the terminal depot at Holden and Seventh Streets, Minneapolis, 3.06 miles.

Capital stock and long-term debt.—The Electric Short Line Railway has outstanding, on date of valuation, a total par value of $3,706,850 in stock and long-term debt, of which $1,506,550 represents common stock, $1,400,300 preferred stock, and $800,000 funded debt.

Results of corporate operations.—For the period from February, 1914, to date of valuation, the aggregate railway operating expenses have been 106.42 per cent of the railway operating revenues. The ratios and the net railway operating income or deficit for the period from February to June 30, 1914, for the years ended June 30, 1915 and 1916, for the six months ended December 31, 1916, for the years ended December 31, 1917 to 1919, and for the six months ending on date of valuation are given below. No dividends have been declared.

Period	Ratio	Income	Period	Ratio	Income
Year 1914 [1]	63. 2	$3, 654	Year 1917	119. 0	[3] $29, 055
Year 1915	69. 0	12, 830	Year 1918	102. 4	[3] 6, 706
Year 1916	86. 3	3, 417	Year 1919	111. 2	[3] 28, 709
Year 1916 [2]	97. 7	[3] 6, 094	Year 1920 [2]	148. 7	[3] 53, 025

[1] Five months.
[2] Six months.
[3] Deficit.